

Industrial Earth

An Ecology of Rural Place

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A thesis submitted for the degree of Doctor of Philosophy of
The Australian National University

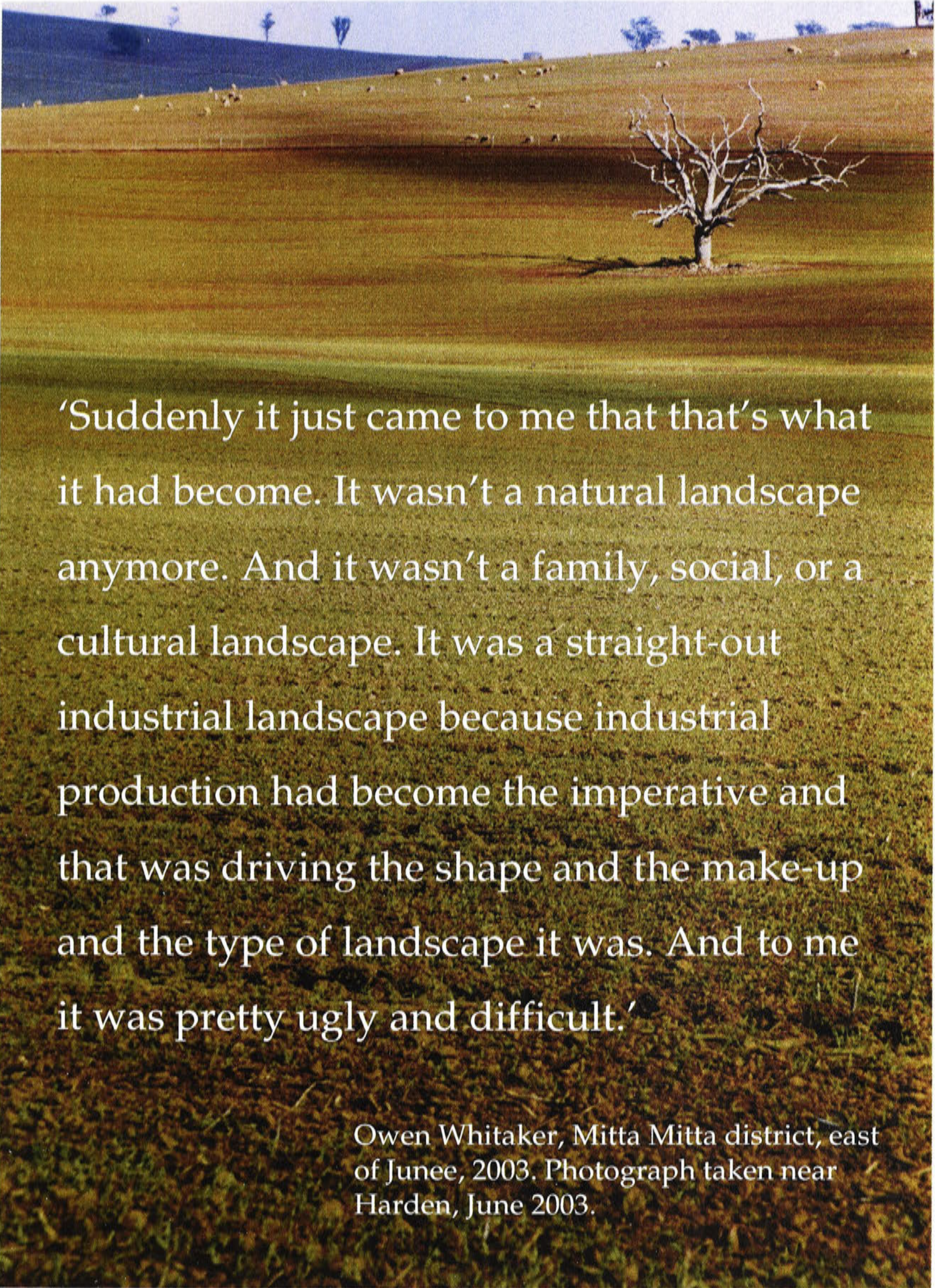
March 2004

This thesis is entirely my own original work.

George Main

George Main

19 March 2004

A photograph of a landscape with rolling hills. The hills are covered in dry, yellowish-brown grass. In the foreground, there is a single, dead, white tree with no leaves. The sky is a pale blue. The overall tone of the image is somber and desolate.

‘Suddenly it just came to me that that’s what it had become. It wasn’t a natural landscape anymore. And it wasn’t a family, social, or a cultural landscape. It was a straight-out industrial landscape because industrial production had become the imperative and that was driving the shape and the make-up and the type of landscape it was. And to me it was pretty ugly and difficult.’

Owen Whitaker, Mitta Mitta district, east of Junee, 2003. Photograph taken near Harden, June 2003.

Acknowledgements

People and places led me to begin this project. In the Cootamundra district, my father taught me to sense the rich human histories of places. My mother instilled a love for native plants, and first introduced me to a chocolate lily. Neil Murray and Judith Wright continue to inspire me. As did Wright, Murray seeks ethical and creative ways of responding to land and history. Commitment and care towards the rural places that raised them underlies the work of both artists.¹ Faith and encouragement from Peter Read, Jenny Andrew, and Libby Robin gave me confidence to enrol.

A superb team of supervisors—Libby Robin, Debbie Rose, and Peter Read—guided my work with care and generosity. Staff and students at the Centre for Resource and Environmental Studies offered valuable assistance and encouragement. Fellow members of the Ecological Humanities Program and those who joined our reading group gave both inspiration and relief. Writing workshops led by Tom Griffiths, Libby Robin, and Greg Denning provided opportunities to take risks and learn. Attending the 2001 biennial Association for the Study of Literature and Environment conference in Arizona and visiting the Land Institute in Kansas helped me define a scholarly direction. I am grateful to Land and Water Australia for funding this project and for organising occasions to meet students with similar interests.

¹ 'Not far from here, a few hours west', writes Murray, 'is the country that raised me.' Neil Murray, 'view from Brunswick', *One man tribe*, Northern Territory University Press, Darwin, 1999, p. 92.

Penny Taylor, my partner, gave helpful insights, constructive comment on the style and content of emerging text, and immense support during a particularly busy time in our lives. Conversations beside the Belubula River with the *Land\$cape: Gold & Water* team—Mandy Martin, Guy Fitzhardinge, Sarah Ryan, Mat Higgins, Ken Hutchinson, Trish Freeman, and others—contributed to my thoughts. Wiradjuri Language Development Project teachers Stan Grant Sr and John Rudder patiently conveyed aspects of Wiradjuri culture. Farmers Graham Strong and Owen Whitaker gave extraordinary insights into the cultures and techniques of mainstream and alternative styles of agriculture. Alec Hansen shared understandings of local ecologies gathered over decades of close observation. Gudhamangdhuray elder Bob Glanville readily gave advice and time, and told family stories in great detail. Muttama farmers Tom and Joyce McMahon always welcomed my family and me into their home. Yvette Salt is responsible for the wonderful map and McComas Taylor made helpful suggestions on layout.

Other people who offered time and thoughts include Ross Anderson, Alex Baldry, Al Baldry, Ian Baldry, James Baldry, Bill Belling, Fay Belling, Margaret Berg, Gladys Black, John Blackwell, Dick Blundell, Joyce Blundell, Ted Brown, Kaye Bryan, Janu Cannings, Pat Caskie, Eunice Chapman, Taffy Cole, Roddam Cooper, Jenny Cowie, Mason Crane, Alan Crowe, Kirsty Davies, Ray Dowling, Alan Druce, Neil Druce, Dean Freeman, Tanny Freeman, Bill Gammage, Leon Garry, Bill Godman, Thomas Graham, Cec Grant, Flo Grant, Dick Green, Max Gregory, Hugh Hamilton, Rob Holmes, Will Howard, Chris Howarth, Dale Huddleston, Ossie Ingram, David Jacobs, Katie Jacobs, Mark Jenkins, Peter Kabaila, Colin Kanaley, Jill King, Darrell Lewis, Margot Lyne, Latarnie McDonald, Jenny McRae, Elizabeth Madden, Agnes Main, Joe Manning, Des Manton, Ron Maslin, Tanya Mihe, Mary Morton, Sue Murphy, Olive Parramore, Harry Podmore, Suzanne Prober, Peter Randall, Hugh Roberts, Jenny Roberts, Jo Roberts, Alistar Robertson, Paul Rumble, Paula Rumble, Megan Ryan, Robert Schofield, Madeleine Scully, Norm Sheehan, Mike Shultz, Gwen Smith, Rosie Smith, Tim Smith, Charlie Stanyer, John Strudwick, Ian Thompson, Janet Thorburn, Marie

Thorp, Ken Trethewey, Carmel Wallis, David Walster, Arthur Webb, Phil Wells,
Chum White, Roly Williams, and George Wilson.

Abstract

Local ecologies on the southwest slopes of New South Wales have changed dramatically since British colonisation ended Wiradjuri methods of tending land in the nineteenth century and an industrial, export-oriented system of primary production emerged. Declining biological diversity, dryland salinisation, soil acidification, and other interrelated ecological problems are today mounting on a regional scale, despite efforts of scientists, farmers, and community groups to counter disorder. I argue that the primary causes of ecological disorder on the southwest slopes are cultural. My research uncovers ways of seeing and knowing that underlie the emergence and operation of industrial agriculture in Australia.

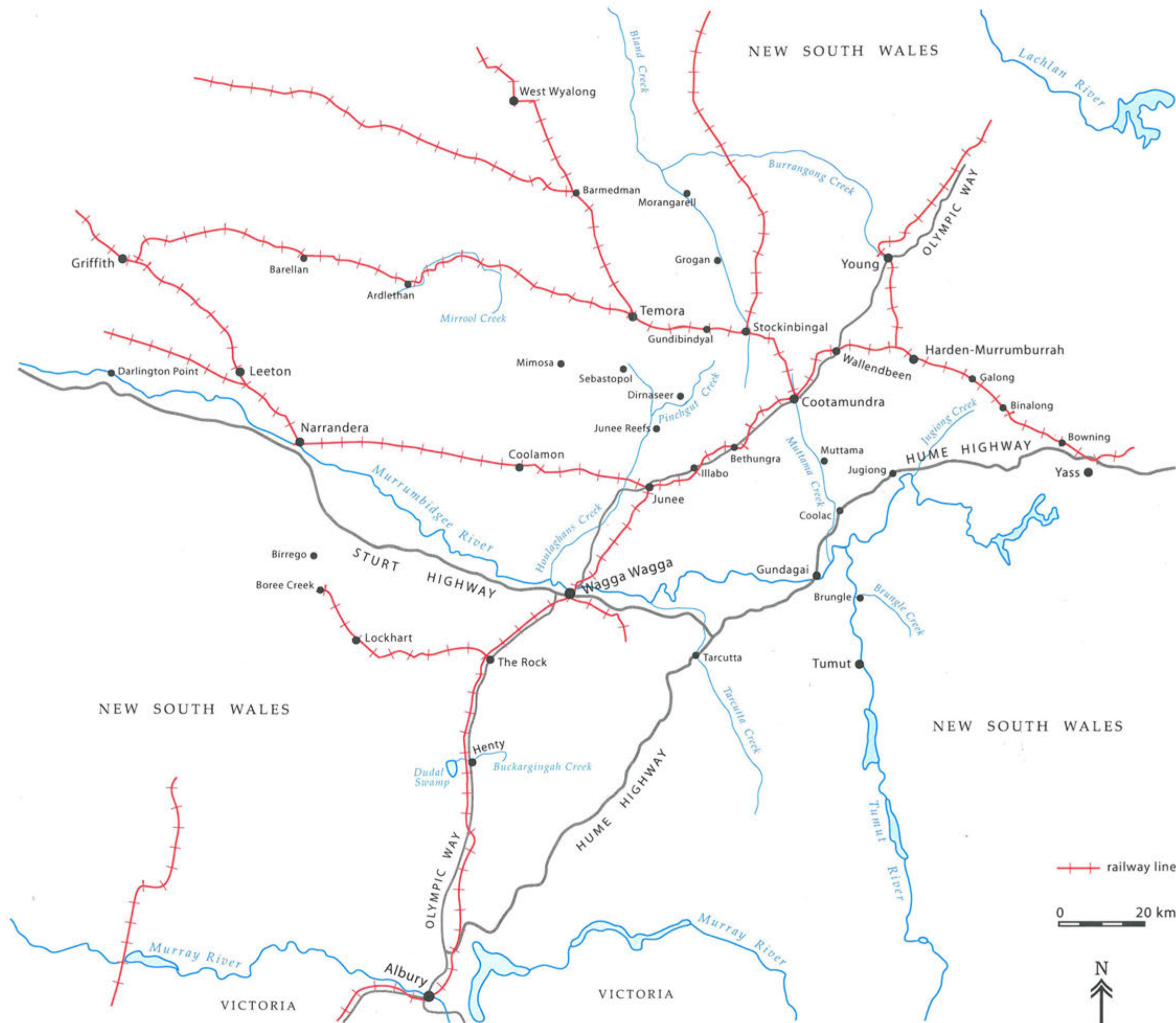
I trace the history of agricultural colonisation on the southwest slopes to explore a shifting dynamic of culture and land. To generate food and natural fibre, the dominant model of industrial farming relies primarily on external inputs, not the dynamism of ecological connections. Local patterns of interactivity tend to be denied. Dichotomised ways of knowing cast divisions between nature and culture, land and people, rural and urban, enabling destructive activity. Recent Australian scholarship documents the silencing and erasure of Aboriginal people by colonial processes. My focus on the natural particularities of a region reveals a wider subjugation and fragmentation of living systems. Actions shaped by abstracted understandings of western science and industrial culture have compromised the ecological wellbeing of colonised places. Close observation of local realities reveals the necessity of incorporating knowledges shaped by his-

tories and particularities of rural places within efforts to counter ecological disorder.

Colonists bound rural places to global networks of trade and power. In the second half of the twentieth century, technological changes and imperatives of the global marketplace saw an intensification of farming systems and a decline in the resilience and wellbeing of local ecologies on the southwest slopes. Government policies and the dynamics of global markets continue to promote rural depopulation, undermining potential for alternative styles of agriculture based on intimate human relations with complex living systems. I demonstrate how modern systems of primary production and powerful cultural processes exacerbate divisions between urban and rural domains. Shared interests are obscured and relationships of care and respect are blocked.

Despite barriers to change, my research shows promising developments on the southwest slopes. Some people are rejecting industrial mindsets and are instead finding ways to fold human activities into the intricate and dynamic patterns of local ecologies. Regenerative models of agriculture attentive to the human histories and natural particularities of places are emerging. Dialogical relations between people and land are enabling the return of diverse life and natural productivity to isolated areas. A more extensive process of regeneration, my research suggests, requires widespread commitment to foster responsive, dialogical relations between people and the particularities and histories of places.

**The southwest slopes
of
New South Wales**



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Introduction

My questions rise from a wide paddock of wheat on the southwest slopes of New South Wales. A ripe crop cloaks a hillside rippling in midday summer heat. Only an elderly yellow box (**baagang**, *Eucalyptus melliodora*) breaks the golden expanse, halfway down the gentle slope.¹ Eucalypt and acacia saplings grow in the distance, where one edge of the wheat crop meets a fence. The revegetation planting forms a long band of dark green. Crop dust billows behind humming machinery nearby, as a bulky harvester sweeps the contour. Good rain fell over autumn and winter. Fertiliser generated a heavy crop of grain. Insecticides and herbicides ensured only humans would reap the produce and nutrients of the paddock. The vast blanket of wheat is one localised part of what is commonly termed our 'ecological footprint', the cost imposed on nature to maintain human bodies.² Problematic assumptions underlie the notion of human footprints on nature. Modern people tend to see themselves as divorced from land and natural systems. Meeting our physical needs, we assume, inevitably burdens local ecologies. Does human presence unavoidably bring destruction? Are we not of the earthly nature our bodies sense, embedded

¹ Wiradjuri names (in bold font) and scientific names (italicised) of native plants and animals are presented once, in brackets following the first use of a common name for a species. Only common names are used thereafter. In many cases, a number of Wiradjuri names are recorded for the same species. No more than two Wiradjuri names are presented in the text, unless the precise identity of a species is unclear. As Wiradjuri names for many species are not recorded and possibly lost, scientific names are sometimes given alone. Wiradjuri names are obtained from a draft version of a Wiradjuri language dictionary being compiled by Stan Grant Sr and John Rudder for publication in 2004 under the direction of the Wiradjuri Council of Elders and with support from the Aboriginal and Torres Strait Islander Commission.

² Nicky Chambers, Craig Simmons and Mathis Wackernagel, *Sharing Nature's Interest: Ecological Footprints as an Indicator of Sustainability*, Earthscan, London, 2000.

within dynamic and intricate patterns of life? Do we really not belong here, as constructive members of vibrant biological communities? Could it be possible to instead imagine and enable the flourishing of living systems and people as one?

Muttama Creek emerges from dense forests of ironbark (**magaa**, *Eucalyptus sideroxylon*) and Cootamundra wattle (*Acacia baileyana*) on the watershed dividing the Murrumbidgee and Lachlan river basins. The stream curves southeast through paddocks and the town of Cootamundra, beneath road and railway bridges, and joins the Murrumbidgee River upstream from Gundagai. The southwest slopes tumble and subside towards the western plains from the mountains and tablelands of the Great Dividing Range. As in most parts of Australia, plants native to the region are adapted to fire and drought. In autumn and winter, unless an El Niño climatic event prevails, moist air drifts eastwards and rises with the land. Steady, gentle rain swells creeks and rivers. Fertile slopes turn green. On hot summer days, the unified, surging calls of cicadas fills the bright air. Grasshoppers leap and fly from swathes of dry grass.

The Cootamundra District Hospital opened on the northern bank of Muttama Creek in 1909. Almost eight decades later the institution closed, as the state government 'rationalised' hospital services throughout the region.³ Behind the old hospital, a cement path leads to a mown area where the maternity building used to stand. Spring sunshine drenched the district and town of Cootamundra the Sunday afternoon I visited my birthplace. I lay down on a sparse lawn of kikuyu and flowering capeweed, and imagined my mother following the path one cold August night more than three decades ago, a painful contraction gripping her body. Pages of my notebook turned in the warm breeze. Pigeons flapped and cooed, perched on the rusted iron roof. Afternoon sun warmed the length of my body. I watched small black ants move through grass, across compressed earth. Occasionally, I lifted my head to take notes. Here, my lungs first drew breath—air damp above Muttama Creek, shifting through trees, over

³ Cootamundra Local History Society, *Cootamundra District: A Photographic History*, Cootamundra, 1989, p. 26.



Muttama Creek waterhole, Cootamundra, October 2003.

paddocks and streets, my skin sensing movement. South and west, at the edges of town, rounded granite hills form a close, curving horizon. As I lay in sunlight, on the ground near the waterway, I felt secure, held by the land.

'Cootamundra is the centre of one of the most fertile farming and grazing districts of the Riverina', *The Land* newspaper declared in 1970, the year I was born beside Muttama Creek.⁴ In the district lived 'a most progressive group of farmers and graziers ever anxious to heed the advice of Department of Agriculture experts and to implement new techniques in pastures, crops and animal husbandry.'⁵ Today, research by landscape ecologists show living systems on the southwest slopes faltering under the intense demands of an industrial, export-oriented system of agricultural production.⁶ Dryland salinisation, soil acidification, biodiversity loss, and other ecological problems are worsening on a regional scale, despite the remedial work of Landcare groups, farmers, and scientists.⁷ Department of Land and Water Conservation scientists recently placed Muttama Creek in the 'High Environmental Stress' category. In the entire Murrumbidgee River catchment, only Jugiong Creek, a waterway draining the Harden and Binalong districts, held a higher ranking of ecological sickness.⁸

As afternoon shadows lengthened beside Muttama Creek, I walked away from the hospital building and crossed a bridge. At a street corner, I noticed storm-water drainpipes emptying a trickle of water into a ditch leading to the creek. Cumbungi (**baaliyan**, **gurmiyug**, *Thypha* spp.) grew where the pipes open onto a bed of silt. The wide pipes drain the southwestern side of town—a sunken

⁴ 'The Riverina' is a vaguely defined region in New South Wales between the Lachlan and Murray rivers. Often considered the region through which the Murrumbidgee River flows, most definitions seem to encompass the southwest slopes and the southwest plains of New South Wales. The southwest slopes region is sometimes called 'eastern Riverina'.

⁵ 'Cootamundra and District, A "Land" Special Feature', *The Land*, 18 June 1970.

⁶ NSW National Parks and Wildlife Service, *New South Wales South West Slopes Bioregion Scoping Study*, Hurstville, 2001, www.nationalparks.nsw.gov.au/PDFs/sbs_nss_scope.pdf, accessed February 2002.

⁷ Phillip Toyne and Rick Farley, *The Decade of Landcare: Looking Backward – Looking Forward*, Discussion Paper Number 30, The Australia Institute, July 2000, p. vii; and Australian State of the Environment Committee, *Australia State of the Environment 2001: Independent Report to the Commonwealth Minister for the Environment and Heritage*, CSIRO Publishing, Collingwood, 2001, www.deh.gov.au/soe/2001/contents.html, accessed December 2003.

⁸ Department of Land and Water Conservation, *Murrumbidgee Catchment Stressed Rivers Assessment Report*, August 1999, p. 57.

area, formerly swampland, now a matrix of streets, houses, sports fields, and a primary school. Drainpipes and other engineering works ensure the expanse below granite hills rarely floods. Brochures issued by the Cootamundra Development Corporation to attract visitors and business investment make no reference to the lost swampland or to the Wiradjuri origins and cultural context of the placename 'Cootamundra'. Beside photographs of grain silos, railway lines, and wide crops, the glossy publications describe a 'progressive' town, 'a prosperous valley', 'high agricultural activity', and 'commercial and industrial growth'.⁹

'Cootamundra', we were told as children, meant something like 'turtle in the swamp'. According to a local promotional booklet published in 1972, the placename 'is derived from an Aboriginal word "Gooramundra" or "Goodamundry", the meaning of which is given variously as "turtles", "marsh or swamp", "low lying".'¹⁰ 'Cootamundra', recent linguistic research reveals, is what settlers made of 'Gudhamangdhuray', a Wiradjuri name for an area of Muttama Creek swampland and for the local clan, a major southern Wiradjuri group.¹¹ 'Gudhamang' is a species of freshwater turtle, possibly the eastern snake-necked turtle (*Chelodina longicollis*), and the suffix '-dhuray' means 'having' or 'with'.¹² Cootamundra, historical and contemporary sources suggest, is a turtle Dreaming place. Gudhamangdhuray clanspeople probably saw a local species of freshwater turtles as kin, descended from the same ancestral Dreaming figure as themselves.¹³ From a Wiradjuri perspective, no fundamental divide exists between human culture and animal nature. Local people took responsibility for nurturing turtle populations in Muttama Creek swampland. In return, freshwater turtles gave life and identity to people. Gudhamangdhuray clan elder Bob Glanville told me his ancestors reserved the swampy place as a turtle sanctu-

⁹ *Cootamundra: A Town on the Move*, Cootamundra Shire Council, Cootamundra Development Corporation, Riverina Regional Development Board, c. 2000; and *Cootamundra New South Wales: New Country Living*, Cootamundra Development Corporation, c. 2000.

¹⁰ *Welcome to Cootamundra*, Cootamundra Municipal Council, 1972.

¹¹ A W Howitt, *The Native Tribes of South-East Australia*, Aboriginal Studies Press, Canberra, 1996 [1904], p. 56.

¹² Stan Grant and John Rudder, Wiradjuri dictionary draft material; and see discussion on turtles in 'Pathways', Chapter Two.

ary.¹⁴ Hunting was forbidden there by law, allowing populations of the reptiles to flourish undisturbed. In good seasons, the animals spread beyond sanctuary boundaries into areas where turtle hunting was permitted. During droughts and other disruptive natural events, sanctuary law ensured turtles survived to repopulate local waterways.

Mary Gilmore grew up southwest of Cootamundra at Brucedale, near Wagga. In the winter of 1878, she began her working life assisting her uncle, George Gray, a Cootamundra schoolteacher.¹⁵ The writer and poet described in broad terms how Wiradjuri applied sanctuary laws to protect and nurture animals and plants. Places reciprocated the protection and life people gave to other species and local ecologies:

All billabongs, rivers, and marshes were treated as food reserves and supply depots by the natives. The bird whose name was given to a place bred there unmolested. The same with plants and animals. Thus storage never failed.¹⁶

When settlers arrived on the southwest slopes, they described grassy woodland and swampy places teeming with diverse life.¹⁷ Through sanctuary regulation and other strategies designed to promote ecological connectivity and wellbeing, Wiradjuri fostered dense and varied populations of plants and animals. Biological diversity ensured abundance of food and materials and bolstered the resilience of land. Like other Aboriginal groups, Wiradjuri systems of tending local ecologies incorporated social and spiritual concerns.¹⁸ An intricate and holistic cultural framework shaped actions towards other species and the land. British colonists imported a different set of attitudes and beliefs to rural Australia, a

¹³ Deborah Rose, Diana James and Christine Watson, *Indigenous Kinship with the Natural World in New South Wales*, NSW National Parks and Wildlife Service, Hurstville, 2003, pp. 24-25.

¹⁴ Bob Glanville, telephone conversation, 5 August 2003.

¹⁵ William Henry Wilde, *Courage A Grace: A Biography of Dame Mary Gilmore*, Melbourne University Press, Carlton, 1988, p. 29.

¹⁶ Mary Gilmore, *Old Days: Old Ways, A Book of Recollections*, Angus and Robertson, Sydney, 1963 [1934], p. 145.

¹⁷ See 'Securing the land', Chapter One, 'Stories of inevitability', Chapter Three, and 'Death and disorder', Chapter Six.

¹⁸ Deborah Bird Rose, *Nourishing Terrains: Australian Aboriginal Views of Landscape and Wilderness*, Australian Heritage Commission, Canberra, 1996, p. 49.

complex system of knowledge forged in the industrial and scientific revolutions of western Europe. As railways extended inland from Sydney late in the nineteenth century, an industrial style of agriculture spread across hillsides and creek flats. 'Even amongst agriculturalists there are a large number that have not yet realised the fact that they belong to an industrial occupation that stands far away ahead of any industrial occupation as regards the scope there is for the utilisation of scientific knowledge', the *Agricultural Gazette of NSW* declared in 1898.¹⁹ Settlers applied scientific methods and industrial technologies to harness land for export-oriented production. In the nineteenth century, argues historian Heather Goodall, the inland slopes and plains of Australia were no 'pre-modern rural pastorate'. Rural colonisation represented 'the modern itself, in its relentless application of new technologies to the landscape, its rapid embrace of 'labour-saving' innovations and the continuing expectation that engineering approaches will solve resource problems'.²⁰

On the western slopes of the Great Dividing Range in southern Australia, settlers perceived biologically diverse living systems of grassy woodland and swamp as chaotic and disordered, as wild terrain. In reality, the complex and interconnected natural patterns tended by Wiradjuri people were highly organised. 'The city desk of a newspaper, a rabbit's intestines, or the interior of an aircraft engine may look messy', writes political scientist James Scott, 'but each one reflects, sometimes brilliantly, an order related to the function it performs.'²¹ Physicist and philosopher Fritjof Capra describes a shifting living order 'manifest in the richness, diversity, and beauty of life all around us.' Ecological dynamism holds together and enlivens the complex patterns of nature. Biological diversity ensures natural stability and productivity. 'Throughout the living world', Capra observes, 'chaos is transformed into order.'²² In rural Australia, European colonists imposed a foreign landscape ideal of visual order and sim-

¹⁹ 'British Millers' Requirements in Wheat', *Agricultural Gazette of NSW*, vol. 9, July to December 1898, p. 750.

²⁰ Heather Goodall, 'Fixing' the Past: Modernity, Tradition and Memory in Rural Australia', *UTS Review*, vol. 6, no. 1, May 2000, p. 22.

²¹ James C Scott, *Seeing Like a State: how certain schemes to improve the human condition have failed*, Yale University Press, New Haven, 1998, p. 275.

plicity. The dispossession of Aboriginal clans, the drainage of swamps, the erasure of diverse communities of grassy woodland life, and the establishment of crop monocultures and pastures comprising few species disordered and destabilised local ecologies.²³

In the first decades of agricultural development on the southwest slopes, removal of native vegetation and repeated cultivation degraded soil structures and exposed land to the erosive powers of wind and water. Throughout the region, heavy rainfall carved deep gullies into hillsides, jagged emblems of instability and disorder. Late in the twentieth century, new technologies and chemical farming systems reduced the need for cultivation and enabled restoration of soil structures. Severe erosion events are now rare on the southwest slopes. Fertilisers, herbicides, and insecticides often enable spectacular crop yields. Towns bustle with economic activity. Unfortunately, the dominant, industrial style of agriculture weakens and destabilises living systems. Modern agriculture relies primarily on external inputs, not ecological connectivity. Fragmentation of dynamic natural patterns makes farmland vulnerable to disturbances. Erasure of plant, animal, and insect communities destroyed the ecological connectivity necessary for land to be strong and naturally productive. Storms, frosts, cold winds, droughts, fires, insects, and other natural forces regularly impose disaster across wide, exposed paddocks. For more than two centuries, settler Australians have tended to cast themselves as battlers against the natural forces of rural terrains.²⁴

In Australia today, many farm managers and scientists are working to understand and modify ecologically destructive agricultural practices. Responses to ecological disorder usually arise within the practical domains of environmental science and natural resource management. Relatively few people are seeking broader historical and cultural explanations of ecological wounding in agricul-

²² Fritjof Capra, *The Web of Life: A New Synthesis of Mind and Matter*, Flamingo, London, 1997, pp. 184-185.

²³ Richard J Hobbs and Colin Yates (eds), *Temperate Eucalypt Woodlands in Australia: Biology, Conservation, Management and Restoration*, Surrey Beatty & Sons, Chipping Norton, 2000.

²⁴ See 'Transcendence and war', Chapter One, especially the discussion on *Battling the Land: 200 Years of Rural Australia*, by Rob Linn, published in 1999.

tural regions. As humanities scholars Jill Ker Conway, Kenneth Keniston, and Leo Marx argue, the ecological problems we face today across the globe originate 'in human behaviour, in complex socioeconomic practices with long histories'.²⁵ To effectively address disorder, ecological problems must be placed within the elaborate historical and cultural contexts from which they arise. Culture shapes human behaviour. 'We treat people, places, and things in accordance with the way we perceive them', observes farmer and writer Wendell Berry.²⁶ Across the southwest slopes of New South Wales, a uniform aesthetic of crops and pastures, towns and homesteads, fences and railway lines, and common patterns of ecological disorder suggest a shared perceptual framework. Established beliefs and attitudes block the emergence of alternative ways of seeing and engaging with land. 'Most of the constraints working against environmental change are cultural: we have to know ourselves as well as the country', writes environmental historian Tom Griffiths.²⁷

The methods and technologies of modern agriculture are only external aspects of an industrial system of primary production. 'It also has an inner dimension', writes environmental historian Donald Worster, 'vast, complex, and effective: the habits of thought and perception that are needed to make the system and its demands appear reasonable.'²⁸ What dynamics of imagination and history transformed the grassy woodlands and swamps of Wiradjuri country into a modern agricultural region? In the following pages, I focus on challenges of the present, on ecological wounds manifest today on the southwest slopes of New South Wales. What particular habits of thought and perception delivered dry-land salinisation, erosion, soil acidification, dying paddock trees, local extinctions? What cultural processes maintain the dominant model of industrial agri-

²⁵ Jill Ker Conway, Kenneth Keniston, and Leo Marx, *Earth, Air, Fire, Water, Humanistic Studies of the Environment*, University of Massachusetts Press, Amherst, 1999, p. 3.

²⁶ Wendell Berry, *Life is a Miracle: An Essay Against Modern Superstition*, Counterpoint, Washington, 2001, p.88.

²⁷ Tom Griffiths, 'The Humanities and an Environmentally Sustainable Australia', address to the DEST conference, The Contribution of the Social Sciences and Humanities to National Research Priorities, Canberra, 28 March 2003, www.humanities.org.au/policy/Priorities/expandingRPPapers/GriffithsRP.pdf, accessed July 2003.

²⁸ Donald Worster, *The Wealth of Nature: Environmental History and the Ecological Imagination*, Oxford University Press, New York, 1993, p. 178.

culture? Might alternative styles of imagining and engaging with rural places return ecological wellbeing and natural productivity to the farmlands of Australia?



The colour photograph in the album of yellowing pages is square with rounded corners, a product of the 1970s. My sister leans on an iron fence enclosing an old grave, her face grim. My brother, a toddler, pauses as he climbs the ironwork set in stone. The camera caught only half of me. I stand at the edge of the image, my right hand on the fence. Behind us, afternoon light casts the shadow of a crucifix across the roof of a small church. Why were we standing by the grave of our grandfather's grandmother, looking so solemn? 'Sacred to the memory of Maria, the beloved wife of T. H. Mate', reads the headstone behind the iron fence, 'Died June 23 1876, Aged 60 years.'

Maria Bardwell and Thomas Hodges Mate sailed to Sydney on the *Palambam* from England as free settlers in 1833.²⁹ The couple met on board and later married.³⁰ Thomas and Maria Mate prospered in the new colony. They established a squatting run at Tarcutta, east of Wagga. The main Sydney to Melbourne road, later named the Hume Highway after explorer Hamilton Hume, ran through the fertile area held by the newcomers. Thomas and Maria took advantage of the increasingly busy route, opening a hotel and store beside Tarcutta Creek, opposite their station homestead. Thomas, a conservative, represented the Hume electorate in the Legislative Assembly of New South Wales throughout the 1860s.³¹ A biography of the squatter and politician appeared in *Australian Men of Mark*. Published in 1889 to celebrate a century of Australian colonisation, the gold-embossed, leather-bound volume presented life histories of influential

²⁹ Cliff Chamberlain, 'Mate, Thomas Hodges (1810-1894)', in Bede Nairn, Geoffrey Serle, and Russel Ward (eds), *Australian Dictionary of Biography*, vol. 5, Melbourne University Press, Carlton, 1974, p. 224.

³⁰ Bill Belling and Fay Belling, *Tarcutta Stories*, second edition, privately published, Tarcutta, 1991, p. 4.

³¹ Chamberlain, 'Mate, Thomas Hodges', p. 224.

male settlers.³² Our visit to the Mate family graves at Tarcutta in the middle of the 1970s extended the honouring of British settlement in Australia. At Tarcutta, we learned identities bound to a patriarchal line of descent infused with a sense of status and colonial triumph.

Thomas Mate headed inland soon after arriving in Australia from England.³³ He worked on Cunningham Plains, near Murrumburrah, to gain skills in pastoralism and station management.³⁴ In 1836, one historical account holds, Mate travelled southwest from the Murrumburrah district in search of strayed cattle.³⁵ He eventually found the animals near Tarcutta Creek, on the other side of the Murrumbidgee River far to the southwest, and decided to establish a squatting run there. It is unlikely the cattle travelled so far and crossed the Murrumbidgee, a major waterway. Thomas Mate, it appears, made the most of his mission to find the lost cattle, venturing further to secure land for himself and his family. Reports of 'depredations' by Aborigines beyond Tarcutta, noted Mate's biographer in *Australian Men of Mark*, stopped him exploring for land south of Tarcutta Creek. According to the biographical entry, the new squatter avoided conflict with the many Wiradjuri people of the Tarcutta district:

His method was kindness and firmness. He insisted on the aboriginals obeying his orders, and he faithfully kept his promises to them. The result was that, though he has had three or four hundred camping round his place at one time, they never killed or even molested a single person on the station, or did any appreciable damage during a period of forty years. On the contrary, they were made very serviceable at lambing and shearing times, and were otherwise useful about the station. It is some years now since the last of the aboriginals disappeared from the neighbourhood. When the townships were formed at Wagga Wagga and the surrounding centres, the blacks were gradually attracted thereto, and by degrees died away by the use of spirits and other results of their contact with civilisation.³⁶

³² Everard Digby (ed.), *Australian Men of Mark*, vol. 1, Charles F Maxwell, Sydney, 1889, p. 130.

³³ William Allen, family history notes, copy held by Jim and Win Main, Cootamundra.

³⁴ Murrumburrah is now the twin town of Harden-Murrumburrah. See 'Pathways', Chapter Two.

³⁵ Ernest Fletcher, *Tarcutta Centenary 1936*, St Mark's Church, Tarcutta, 1936.

³⁶ Digby, *Men of Mark*, pp. 130-31.

Perhaps Thomas Mate never did clash with Wiradjuri at Tarcutta. Local clan members undoubtedly knew the possible brutal consequences of resistance. Elsewhere on the southwest slopes, violence erupted as tense relations between squatters and Wiradjuri collapsed. Outside the Wiradjuri Regional Aboriginal Land Council office in Wagga, west of Tarcutta, a brass plaque titled 'Statement of the Wiradjuri Nation' honours Wiradjuri opposition to colonisation, 'when the rivers ran with the blood of our ancestors leaving the name Wiradjuri embedded forever in Australia's history'.³⁷ Land Council manager Roly Williams said he knew no Wiradjuri families connected by ancestry to Tarcutta.³⁸ Turbulent histories broke many of the ties binding Wiradjuri to places. Roly mentioned the forced movement of his people onto Aboriginal reserves like Brungle, in the foothills of the Snowy Mountains, and Warangesda, on the Murrumbidgee downstream from Narrandera. When the New South Wales Parliament granted the Aborigines Protection Board powers to compulsorily remove children from families in 1916, another wave of dislocation and disruption struck the Wiradjuri community.³⁹

Meagre accounts exist of individuals who were perhaps the last remaining Tarcutta Wiradjuri. Elderly local residents remember Tang, an Aboriginal man who worked as a vegetable gardener for Alfred Mate, son of Thomas and Maria. Tang grew watermelons so large they were carted in wheelbarrows, Olive Parramore remembers.⁴⁰ According to Tarcutta historians Bill and Fay Belling, the old man loved cricket and fishing, and died in a Wagga hospital soon after Alfred Mate and his family moved to Sydney in 1918.⁴¹ Nobody I spoke to knew if Tang had another name or any descendants. Chum White told me of another old Aboriginal man, Ned Turner, who also worked for the Mate family. When Chum was a boy, several years before the outbreak of World War One, Turner

³⁷ 'Statement of the Wiradjuri Nation', Wiradjuri Regional Aboriginal Land Council premises, Docker Street, Wagga, 2001.

³⁸ Roly Williams, conversation at the Wiradjuri Regional Aboriginal Land Council office, Wagga, 6 April 2001.

³⁹ See 'Returning to Cootamundra', Chapter Three and 'Unremembered voices', Chapter Five.

⁴⁰ Olive Parramore, conversation at Wetmore, Ladysmith district, 24 April 2001.

⁴¹ Belling, *Tarcutta Stories*, p. 113.

gave him a silk handkerchief for his birthday. Chum recited meanings of local placenames he suspects Ned Turner taught him. 'Tarcutta', Chum learned, is the apostlebird (**dhandhalgurung**, **dyuriwiny** *Struthidea cinerea*), the name echoing a particular call of the species.⁴²

A rich store of local ecological understandings and cultural heritage disappeared as the Wiradjuri population at Tarcutta declined. In 1839, three years after the arrival of Thomas and Maria Mate, Lady Jane Franklin, wife of Sir John Franklin, Governor of Van Diemen's Land, embarked on a journey from Melbourne to Sydney. Halfway, at Tarcutta, Jane Franklin and her companions camped near swampland on Tarcutta Creek beside which Thomas and Maria Mate built their home. As darkness descended, Franklin gazed through trees towards fires burning in the Aboriginal camp. Inside a hut of eucalypt slabs she met a young man, Thomas Mate's brother. The youth told her 'the native name for this place was Umumby', Franklin wrote in her diary.⁴³ Thomas and Maria Mate called their pastoral station 'Umutbee', a local Wiradjuri name for the Tarcutta Creek swampland.⁴⁴ The next morning, Aboriginal camp residents performed boomerang throwing for Jane Franklin. She met a man known as 'Dap-toe', an elder wearing a copper breastplate engraved with emus (**dinawan**, *Dromaius novaehollandiae*) and kangaroos (probably **wambuwuny**, *Macropus giganteus*). 'Natives have a name for every creek every hill', Franklin noted at Tarcutta.

On the main road from Melbourne to Sydney, Umutbee Swamp featured in *Bailliere's New South Wales Gazetteer and Road Guide*, published in 1866. Just upstream from Umutbee village, Tarcutta Creek widened into a swampy expanse, thirteen kilometres long. Umutbee Swamp became a shallow lake in wet sea-

⁴² Chum White, telephone conversation, 1 June 2001, and a second conversation at Wallendbeen, 5 October 2001. As mentioned, many species have a number of Wiradjuri names. Anthropologist and Wiradjuri linguist John Rudder explained that across Australia, most Aboriginal groups gave, and in areas continue to give, significant species a number of ceremonial names each. If a person has the same name as a species or perhaps an artefact, when the person dies the name is not used for at least a number of years. An alternative name is found to refer to that species or item. John Rudder, email correspondence, 2 March 2004.

⁴³ Jane Franklin, 1839 diary, National Library of Australia, manuscript collection, MS 114, entry for 25 April 1839.

STATEMENT OF THE WIRADJURI NATION

**THIS PLAQUE IS DEDICATED TO THE WIRADJURI PEOPLE:
TO HONOUR THE RESISTANCE OF OUR PEOPLE TO
WHITE SETTLEMENT IN THE EARLY 1800's WHEN THE RIVERS RAN
WITH THE BLOOD OF OUR ANCESTORS LEAVING THE NAME
WIRADJURI EMBEDDED FOREVER IN AUSTRALIA'S HISTORY.**

**TO HONOUR THOSE WHO HAVE PASSED ON,
THOSE WHO STILL STRUGGLE FOR UNITY IN THE FACE OF
OPPRESSION AND AGGRESSION, AND THOSE TO COME.**

**21 NOVEMBER 1993 THE INTERNATIONAL YEAR OF
THE WORLD'S INDIGENOUS PEOPLE.**

BY EVELYN HAMPTON

Plaque outside Wiradjuri Regional Aboriginal Land Council office, Docker Street, Wagga, 2001.

sons, the guide explained, 'visited by innumerable waterfowl.'⁴⁵ Harry Podmore, my grandfather's cousin, is a retired Tarcutta butcher. He remembers swans (**dhundhu**, *Cygnus atratus*) flying over the town to nest on swampland upstream. About thirty years ago, Harry told me, landholders used new, powerful earthmoving machines to drain the remaining parts of Umutbee Swamp. Cattle prices were high, and the dark, rich swamp earth grew dense pasture.⁴⁶

Department of Land and Water Conservation scientists Justin Nancarrow, Robert Cawley, and Tim Smith recently studied the ecological changes pastoral and agricultural development brought to Tarcutta Creek.⁴⁷ A complex system of pools and swamps encountered by British explorers was gone.⁴⁸ Instead, an eroding channel curved through the valley, delivering salty water and silt into the Murrumbidgee River. Nancarrow, Cawley, and Smith thought it unlikely that small remnants of native vegetation on the lower reaches of Tarcutta Creek held enough seed or genetic diversity to allow the regeneration of plant communities cloaking the waterway before colonisation.⁴⁹ Vigorous weed populations and unrestrained access by sheep and cattle threatened to further degrade the stream. Facing such ecological instability and loss, the scientists asked a dual question: 'Where do we start and what do we do?'⁵⁰

In light of the wounding colonisation brought to the continent, the question posed by the scientists may be recast as a dilemma for every settler Australian. Instead of perpetuating historical patterns of ecological and social injustice, might we think and act in healing ways? Anthropologist and historian Deborah Rose suggests that in 'space that is fragmented, in places that are broken, in the knowledge that much damage is not even visible, only certain kinds of actions

⁴⁴ Belling, *Tarcutta Stories*, p. 5.

⁴⁵ F F Bailliere, *Bailliere's New South Wales Gazetteer and Road Guide*, F F Bailliere, Sydney, 1866, p. 534 and p. 566.

⁴⁶ Harry Podmore, conversation at Tarcutta, 8 October 2001.

⁴⁷ Justin Nancarrow, Robert Cawley, and Tim Smith, *The Ecological Health of Tarcutta Creek: A Study of the Physical and Biological Integrity of Tarcutta Creek*, Department of Land and Water Conservation, Murrumbidgee Region, 2001.

⁴⁸ Tim Smith, Stephen Dudgeon, and Stuart Pengelly, *Tarcutta Creek Catchment Riverine Corridor Management and Works Manual*, Department of Land and Water Conservation, Murrumbidgee Region, c. 1996, pp. 1-2; and Nancarrow et al., *The Ecological Health of Tarcutta Creek*, p. 1.

⁴⁹ Nancarrow et al., *The Ecological Health of Tarcutta Creek*, p. 59.

are ethically possible.⁵¹ Rose draws on the writings of philosopher Emil Fackenheim, who advocates a process of 'turning toward' damaged and subjugated people to seek dialogical, respectful relations. Rose extends the concept to embrace wounded places and other species. Turning towards others and starting dialogue brings recognition of shared embeddedness in both natural systems and the present. The careful process offers hope 'that rupture and wounds are not the only forms of action we will ever produce.'⁵² As Rose points out, there are risks involved when we turn hopefully towards people, other beings, and places. In a society taken by linear notions of progress and monological relations with nature, we cannot know what to expect when we stop to listen and feel.

When I returned to Tarcutta in 2001, I drove along Mates Gully Road, beside the steep, eroding banks of Mates Gully Creek. Fast food shops and petrol stations line the Hume Highway through Tarcutta. I turned off the relentlessly busy route and headed uphill. Inside the old brick church, a stained glass window memorialising Thomas Mate shows grain-filled heads of wheat and grapevine roots entwined in rich soil. Outside, amid the Mate family graves, I encountered glossy, purple blossoms of chocolate lilies (**burrugurra**, *Dichopogon strictus*) swaying on wiry stalks.⁵³ Scent of fine chocolate filled the warm spring air. Wiradjuri people at Tarcutta probably harvested and roasted the watery, edible tubers of the small herb, a common food plant of southeast Australia.⁵⁴ Chocolate lilies became rare on the western slopes of the Great Dividing Range as farming systems intensified after World War Two. Crops and 'improved' pastures replaced grassy woodland remnants. Standing on the hillside beside the graves, I heard trucks rumbling into Tarcutta on long journeys between cities. I knelt on damp red earth to draw in the dreamy aroma of a chocolate lily blossom. Ants crawled over rotting leaves. One deep breath, then another, as

⁵⁰ Nancarrow et al., *The Ecological Health of Tarcutta Creek*, p. 1.

⁵¹ Deborah Bird Rose, 'Rupture and the Ethics of Care in Colonized Space', in Tim Bonyhady and Tom Griffiths, *Prehistory to Politics: John Mulvaney, the Humanities and the Public Intellectual*, Melbourne University Press, Carlton, 1996, p. 214.

⁵² Rose, 'Rupture and the Ethics of Care', p. 215.

⁵³ Stan Grant and John Rudder define 'burrugurra' as 'a tuberous plant'. The specific Wiradjuri name for chocolate lilies may be lost.



Chocolate lilies flowering below Maria Mate's grave, St Mark's Church, Tarcutta, October 2001.

the flowering lily drew me into relation with particularities and histories, into dialogue with place.



My work engages with perspectives from a range of academic disciplines. Recent scholarship in Australian social and environmental history provides a rich foundation.⁵⁵ Critical reflections on the culture and history of modern agriculture in a settler society are well developed in the United States.⁵⁶ In Australia however, responses to the ecological and social ramifications of industrial, export-oriented farming emerge almost exclusively from the physical and social sciences.⁵⁷ My work incorporates these valuable perspectives and seeks a wider context. *Industrial Earth: An Ecology of Rural Place* explores the dynamics of culture and history implicated in the ecological disorders found today across one Australian agricultural region, the southwest slopes or eastern Riverina of New South Wales. The widespread sickness and decline of paddock trees, for example, cannot be understood separately from the displacement and murder of

⁵⁴ Tim Low, *Wild Food Plants of Australia*, Angus and Robertson, Sydney, 1991, p. 105.

⁵⁵ For example: Peter Read, *A Hundred Years War: The Wiradjuri People and the State*, privately published, Australian National University, 1994 [1988]; Deborah Rose, *Hidden Histories: Black Stories from Victoria River Downs, Humbert River and Wave Hill Stations*, Aboriginal Studies Press, Canberra, 1991; Heather Goodall, *Invasion to Embassy: Land in Aboriginal Politics in New South Wales, 1770-1972*, Allen and Unwin, St Leonards, 1996; Peter Rimas Kabaila, *Wiradjuri Places: The Murrumbidgee River Basin with a section on Ngunawal country*, second edition, Black Mountain Projects, Jamison Centre, 1998; Andrea Gaynor, Mathew Trinca, and Anna Haebich (eds), *Country: Visions of Land and People in Western Australia*, Western Australian Museum, Perth, 2002; Libby Robin, *Defending the Little Desert: the Rise of Ecological Consciousness in Australia*, Melbourne University Press, Carlton South, 1998; Paul Sinclair, *The Murray: A River and its People*, Melbourne University Press, Carlton South, 2001; and Tom Griffiths, *Forests of Ash: An Environmental History*, Cambridge University Press, Cambridge, 2001.

⁵⁶ For example: Wendell Berry, *The Unsettling of America: Culture & Agriculture*, Sierra Club Books, San Francisco, 1996 [1977]; Andrew Kimbrell (ed.), *Fatal Harvest: The Tragedy of Industrial Agriculture*, Island Press, Washington, 2002; Worster, *The Wealth of Nature*; and Wes Jackson, *Becoming Native to this Place*, Counterpoint, Washington, 1994.

⁵⁷ For example: E C Lefroy and R J Hobbs, *Agriculture as a Mimic of Natural Ecosystems*, Rural Industries Research and Development Corporation, Barton, 1998; Jim Pratley and Alistar Robertson (eds), *Agriculture and the Environmental Imperative*, CSIRO Publishing, Collingwood, 1998; Neil Barr and John Cary, *Greening a Brown Land: the Australian Search for Sustainable Land Use*, Macmillan, South Melbourne, 1992; Stewart Lockie and Lisa Bourke (eds), *Rurality Bites: The Social and Environmental Transformation of Rural Australia*, Pluto Press, Annandale, 2001; Bill Pritchard and Phil McManus (eds), *Land of Discontent: The Dynamics of Change in Rural and Re-*

Wiradjuri people, nor from western European philosophical and cultural traditions, or the dominant economic fundamentalist ideologies of the present.⁵⁸ As a child on the New England tablelands of northern New South Wales, poet Judith Wright thought she saw the ghosts of elderly Nganyaywana men, 'dark-skinned and shadowy, standing with spears in their hands among the few trees left standing on our sheep-ridden land'. Late in the twentieth century, scientists sought reasons for the premature deaths of paddock trees in the New England region and throughout rural Australia. 'But I think I felt them myself,' Wright reflected on the reasons for tree dieback, 'when as a small child I believed I saw those dark bearded faces moving among the trees, dispossessed and silent.'⁵⁹

In broad terms, my work belongs within the ecological humanities. Scholars in this emerging field apply methods and frameworks developed within humanities disciplines to pursue ecological questions.⁶⁰ Enlightenment notions of a fundamental separation between human culture and physical nature are critiqued and challenged. Insights from the humanities and natural sciences are blended, expanding the scope of inquiry. Aboriginal understandings of human interrelatedness with the rest of nature inform the ecological humanities.⁶¹ Settler Australians struggling to build stories that may enable peaceful inhabitation of the land must respect Aboriginal systems of knowledge, writer and performing artist Neil Murray argues. 'To acquire an affinity for them', he writes, 'enriches our understanding of the land and how we might aspire to live gracefully in it.'⁶² Murray is advocating respectful dialogue, not appropriation. On the southwest slopes of New South Wales, Wiradjuri teachers of the past and present offer perspectives central to the intermeshed projects of ecological and social justice.

gional Australia, UNSW Press, Sydney, 2000; and Ian Gray and Geoffrey Lawrence, *A Future for Regional Australia: Escaping Global Misfortune*, Cambridge University Press, Cambridge, 2001.

⁵⁸ Jane Kelsey, *Economic Fundamentalism*, Pluto Press, London, 1995.

⁵⁹ Judith Wright, *Half a lifetime*, Text Publishing, Melbourne, 1999, p. 296.

⁶⁰ Ecological Humanities Program, Centre for Resource and Environmental Studies, 'A Manifesto for the Ecological Humanities: Re-threading the Fabric of Knowledge', <http://cres.anu.edu.au/ecologicalhumanities/manifesto.php>, accessed March 2004.

⁶¹ Rose et al., *Indigenous kinship*, p. 66.

⁶² Neil Murray, 'A brief discussion on "belonging" for Sensitive Non-Aboriginals', paper delivered at the Belonging conference, 12-14 November 1999, Humanities Research Centre, Australian National University.

In Chapter One, I explore different strategies applied by settlers on the southwest slopes to rearrange and harness land for primary production. How did colonists imagine and engage with Wiradjuri people and other agencies they encountered? What understandings of land and people underlie the discipline of agricultural science? Chapter Two considers the binding of the region to a global system of agricultural production and trade. How have ties between the southwest slopes and worldwide networks of trade and power shaped rural places and lives? Chapter Three examines narratives of progress and different understandings of time. How do notions of time as linear and abstracted from place influence relations between land and people? Might alternative constructions of time and place enable regeneration? Chapter Four considers dominant perceptions of a range of divisions, including the disembeddedness of humans and human activity from natural systems, and an emphasis on sharp divides between rural and urban domains. How are notions of divorce constructed and maintained? What activities and outcomes are enabled and disabled by such notions? I discuss reasons for the general inability of settler Australians to develop mutually nourishing, dialogical relations with farmland in Chapter Five. What ecological consequences arise when natural forces and the diverse voices of rural places are systematically denied? Chapter Six explores the dynamism active in the intricate natural patterns of the land. How have people and natural systems responded to the colonial project of mastery? In Chapter Seven I seek alternative understandings of land and people. Is farmland something more than an industrial resource? How might a reimagining of settler relations with rural places and history unfold? In an epilogue, I present some insightful understandings offered by farmer Owen Whitaker. His perspectives open possibilities for ecological and social regeneration in rural Australia.

Mastery

Securing the land

On the main street of Stockinbingal, opposite the railway line and wheat silos, two small buildings house the local museum. A timber box sealed with a sheet of glass sits on a table in a corner.¹ The box contains a diorama of a horrific event played out by carved stone models. Five Aboriginal warriors attack a hut of eucalypt slabs and bark. Two men protect themselves with wooden shields as they launch spears from woomeras. One spear has struck the front door. Another is embedded in the slab wall of the hut. A dog strains on a chain, leaping at an Aboriginal man climbing through a side window. A dead European woman lies on the ground outside, her hair spread to one side, a spear protruding from her stomach. The front windows of the hut are boarded. Perhaps children cower inside. Specimens of plants native to the southwest slopes decorate the wide frame around the scene: seedpods of black cypress pine (**yumbi**, *Callitris endlicheri*), fronds of bracken fern (*Pteridium esculentum*), cones of drooping she-oaks (**burrin**, *Allocasuarina verticillata*), and chunks of lichen peeled from stone.

The word 'Wiradjuri' has two parts. 'Wiray' means 'no', while the suffix '-juri', or perhaps more accurately '-dhuray', denotes 'having' or 'with'.² The Wiradjuri

¹ Stockinbingal Museum, 8 November 2001.

² Grant and Rudder, Wiradjuri dictionary draft material; and see Introduction, discussion about the meaning of 'Gudhamangdhuray'.

language belongs to a group of similar languages spoken in adjacent parts of inland New South Wales. Each language within the group has a different name beginning with a prefix meaning 'no' and ending with a suffix meaning 'with'. North of Wiradjuri country, for example, Wayilwan say 'wayil' for 'no'. In Wayilwan, the suffix '-wan' denotes 'with'.³ Wiradjuri man Norm Sheehan, an indigenous knowledge teacher at the University of Queensland, told me why his people and neighbouring groups defined themselves as 'no-having'.⁴ If people wanted to enter an area or gather resources there, they had to seek permission from those holding legal rights over the place in question. Within the framework of Wiradjuri law, Norm Sheehan explained, certain individuals and clans held rights and responsibilities in relation to particular areas, and thereby had power of veto over requests made concerning those areas and resources found there. Wiradjuri legal rights extended across the greater part of three river basins west of the Great Dividing Range: the Wambuul, Galari, and Marrambidya, known generally today as the Macquarie, Lachlan, and Murrumbidgee.⁵

Sarah Musgrave was born in 1830 at Burrangong, where the town of Young later grew. Her memoirs suggest that in the first years of colonisation, settlers acknowledged and worked within Wiradjuri systems of law.⁶ Burrangong was a pastoral station near the watershed of the Lachlan and Murrumbidgee rivers held by Musgrave's uncle, James White. Establishing a station in the early days, Sarah Musgrave explained, 'was a simple enough matter, after one had reached a desirable place on which to squat, providing, of course, one got a passport from the blacks'. James White passed well outside the area administered by colonial officials when he came to Burrangong in 1826. Vastly outnumbered by Wiradjuri, and without the prospect of help from colonial military or police, White negotiated with a local lawman for approval to stay in Wiradjuri country. Sarah Musgrave recounted the delicate negotiations that took place when her

³ Tamsin Donaldson, 'Language', in Steve Miller, *Sharing a Wailwan Story*, Powerhouse Museum, Sydney, 1999, pp. 40-42; and Tamsin Donaldson, *Ngiyampaa Wordworld 1*, Australian Institute of Aboriginal and Torres Strait Islander Studies, 1997, p. vii.

⁴ Norm Sheehan, conversation at Purga, Brisbane, 4 July 2002.

⁵ Iris Clayton and Alex Barlow, *Wiradjuri of the Rivers and Plains*, Heinemann Library, Port Melbourne, 1997, p. 27; and Grant and Rudder, Wiradjuri dictionary draft material.



Mural (detail), Yass River bridge, Yass, 2004.

uncle set up camp for the first time. A senior Wiradjuri man approached James White:

At first the chief disputed with Mr. White the possession of the land, but, under the influence of many gifts from Mr. White's stores, the black chief became friendly, and allowed the embryo squatter to remain, guaranteeing him immunity of attack from the tribe.⁷

Musgrave's uncle called the Wiradjuri man 'Cobborn Jackie' and gave him an inscribed brass breastplate, 'the permanent emblem of Jackie's office as the king of the tribe'. According to historian Heather Goodall, the presentation of 'king plates' showed acknowledgment of Aboriginal legal structures, 'where the elderly individuals who held greatest authority were those who spoke for the land'.⁸ At Burrangong, after a process of exchange and negotiation, the senior Wiradjuri lawman allowed White to establish his squatting run. Cobborn Jackie probably knew what possibilities lay in resistance. Only three years before, colonial officials declared martial law to suppress a violent uprising of northern Wiradjuri clans around Bathurst. Although deaths were never recorded, historian Peter Read suggests hundreds of Wiradjuri people died in the conflict, perhaps as much as one third of the local population.⁹ These events may have encouraged the lawman of Burrangong and other elders of southern Wiradjuri clans to approach early colonists with caution and seek agreeable relations.

Observance of Wiradjuri law by some squatters failed to keep the peace across the southwest slopes. In the early decades of colonisation, relations between Wiradjuri and settlers were fearful and unstable. Explorer Charles Sturt camped south of Burrangong squatting run, near Gundagai beside the Murrumbidgee River, in November 1829. Aborigines were 'hostilely inclined' on one station established a few months ago, Sturt noted in his journal. He expressed concern

⁶ Sarah Musgrave, *The Wayback*, Bland District Historical Society and Young Historical Society, West Wyalong, 1979 [1926], pp. 2-3.

⁷ Musgrave, *The Wayback*, p. 2.

⁸ Goodall, *Invasion to Embassy*, p. 63.

⁹ Read, *A Hundred Years War*, p. 10.

that stockmen there were 'wholly without the means of defence'.¹⁰ As pastoral settlement intensified, it appears force replaced negotiation as the primary method of securing grazing land. Governor Bourke legalised the occupation of inland parts of New South Wales in 1836.¹¹ Three years later Henry Bingham, Commissioner of Crown Lands in the Murrumbidgee squatting district, wrote that on the edge of settlement 'arms are required in order that the Servants may be enabled to protect themselves from the Blacks'.¹² Many feared the possibility of Wiradjuri fighting with guns. Bingham suggested the Governor of New South Wales order settlers to 'not in future give the Natives arms or ammunition, on any account'.¹³ Colonial Secretary Edward Deas Thompson announced that squatting licences would not be renewed 'of any Persons who may give Arms or Ammunition to the Blacks, or whose Servants may be found to have supplied them with such articles'.¹⁴ He urged squatting district commissioners to coax guns from Aborigines already armed.

Male colonists sought control over the fearful situation. James Gormly came to the Riverina region of southern New South Wales in the 1840s. Male settlers usually arrived alone in the early years, Gormly explained, as 'the presence of hundreds of the aborigines along the Murrumbidgee and Tumut rivers made it unsafe for women and children to be left alone in the remote inland districts'.¹⁵ Henry Cosby was the first Commissioner of Crown Lands for the squatting district between the Murrumbidgee and Lachlan rivers. In 1839, he estimated there were only fifty or sixty women in the local population of about two thousand mostly convict and ex-convict settlers.¹⁶ Men dominated Australian rural society. Mary Gilmore grew up in the Wagga region in the 1860s and 1870s, and remembered a childhood 'in a world of men'. While domestic duties kept most

¹⁰ Charles Sturt, *Proceedings of an Expedition into the Interior of New Holland, 1829 and 1830*, Sullivan's Cove, Adelaide, 1989, p. 18.

¹¹ Stephen Roberts, *The Squatting Age in Australia 1835-1847*, Melbourne University Press, Melbourne, 1964 [1935], p. 81.

¹² Henry Bingham to Edward Deas Thompson, 26 October 1839, State Records NSW, 4/2439.1.

¹³ Henry Bingham to Edward Deas Thompson, 21 July 1839, State Records NSW, 4/2438.2.

¹⁴ Colonial Secretary's Office, *New South Wales Government Gazette*, Sydney, 21 August 1839.

¹⁵ James Gormly, 'Early Days In and near Wagga Wagga', Gormly family records, Charles Sturt University Regional Archives, Wagga.

women indoors, men 'made the world' on outback roads, mustering cattle, breaking horses, and making endless talk 'of a kind that was full of the colour of life'.¹⁷ Gilmore recalled her father discussing with other men their concerns about Aborigines procuring guns, and the brutal actions 'the need of the times compelled':

So the poor black had to die before arms became his possession; before women had to be shut in a room fearing the firing of a roof, fearing the failure of their men's limited ammunition, and having for their only comfort the knowledge that, when the time came, enough bullets would be saved for each of them and their children: as I knew they would be saved for my mother and me.¹⁸

While some historians question the accuracy of Gilmore's accounts, they agree her writings hold a general truthfulness.¹⁹ Conflict she describes between settlers and Wiradjuri on the southwest slopes during her childhood, for example, probably took place decades before, or perhaps further inland where frontier dynamics still prevailed. On the inland slopes and plains of Australia, 'much human life has been sacrificed to the manes of sheep or cattle', wrote explorer and surveyor Thomas Mitchell in 1848.²⁰ Settlers and domestic livestock arrived in numbers on the southwest slopes of New South Wales in the late 1820s. Colonial officials did not establish a presence in the region for another decade. Vague references suggest bloody encounters in the squatting period, possibly before and after the arrival of commissioners of crown lands. In 1937 Mat Sawyer, owner of Eulomo, an extensive pastoral station near Bethungra, southwest of Cootamundra, wrote in a letter that his grandfather 'came here and fought

¹⁶ Henry Cosby, evidence given before the Committee on Police and Gaols, 'Report of the Committee on Police and Gaols', *Votes and Proceedings*, vol. 2, NSW Legislative Council, Sydney, 1839, p. 69.

¹⁷ Gilmore, *Old Days: Old Ways*, pp. 70-71.

¹⁸ Gilmore, *Old Days: Old Ways*, p. 71.

¹⁹ Peter Read, *A history of the Wiradjuri people of New South Wales 1883-1969*, PhD thesis, Australian National University, 1983; and Bill Gammage, *Narrandera Shire*, Bill Gammage for the Narrandera Shire Council, Narrandera, 1986, p. 20.

²⁰ Thomas Livingstone Mitchell, *Journal of an Expedition into the Interior of Tropical Australia in Search of a Route from Sydney to the Gulf of Carpentaria*, Friends of the State Library of South Australia, Adelaide, 1999 [1848], p. 414.

the blacks'.²¹ Placenames chosen during the squatting period allude to atrocities. In the 1840s, the area near Bethungra that became Eulomo station was part of Ironbong run. 'Slaughter House Gully' lay on the boundary of Ironbong.²² Near Temora, settlers named a rise 'Killing on the Pinnacle'.²³ Did these placenames record violence committed against Wiradjuri people, or the erasure of other impediments to colonisation? Feral horses, for example, were a great nuisance to early pastoralists on the southwest slopes. Today, Killing on the Pinnacle and Slaughter House Gully are not marked on maps of the Temora and Bethungra districts. Perhaps only the land remembers what events unfolded at those places where sheep now graze and crops grow.

Southwest of Temora and Bethungra, Poisoned Waterholes Creek curves through paddocks below the Murrumbidgee River, near Narrandera. Brutal conflict in the Narrandera district is well documented. In February 1839 on Yonco station, a stockman searching for a horse noticed crows (**waagan**, *Corvus* spp.) circling in the air. He approached the site beneath the birds, expecting to discover a dead beast. The stockman found the body of missing convict John Williams, a spear wound in his back.²⁴ Throughout 1839, Wiradjuri fighters forced settlers to abandon stations across a stretch of country either side of Narrandera. In the early nineteenth century, historian Bill Gammage explains, the area around the Murrumbidgee River west of Wagga belonged to the Ngarrangdhuray, a major southern Wiradjuri clan based around Narrandera.²⁵ With the help of allies from other regions, Ngarrangdhuray clansmen slaughtered cattle and stockmen in a sustained and coordinated effort to regain country. Beremmed station alone lost one thousand cattle.²⁶ 'The Settlers on the River are in a Great state of alarm', wrote Commissioner Henry Cosby in May 1839, 'not

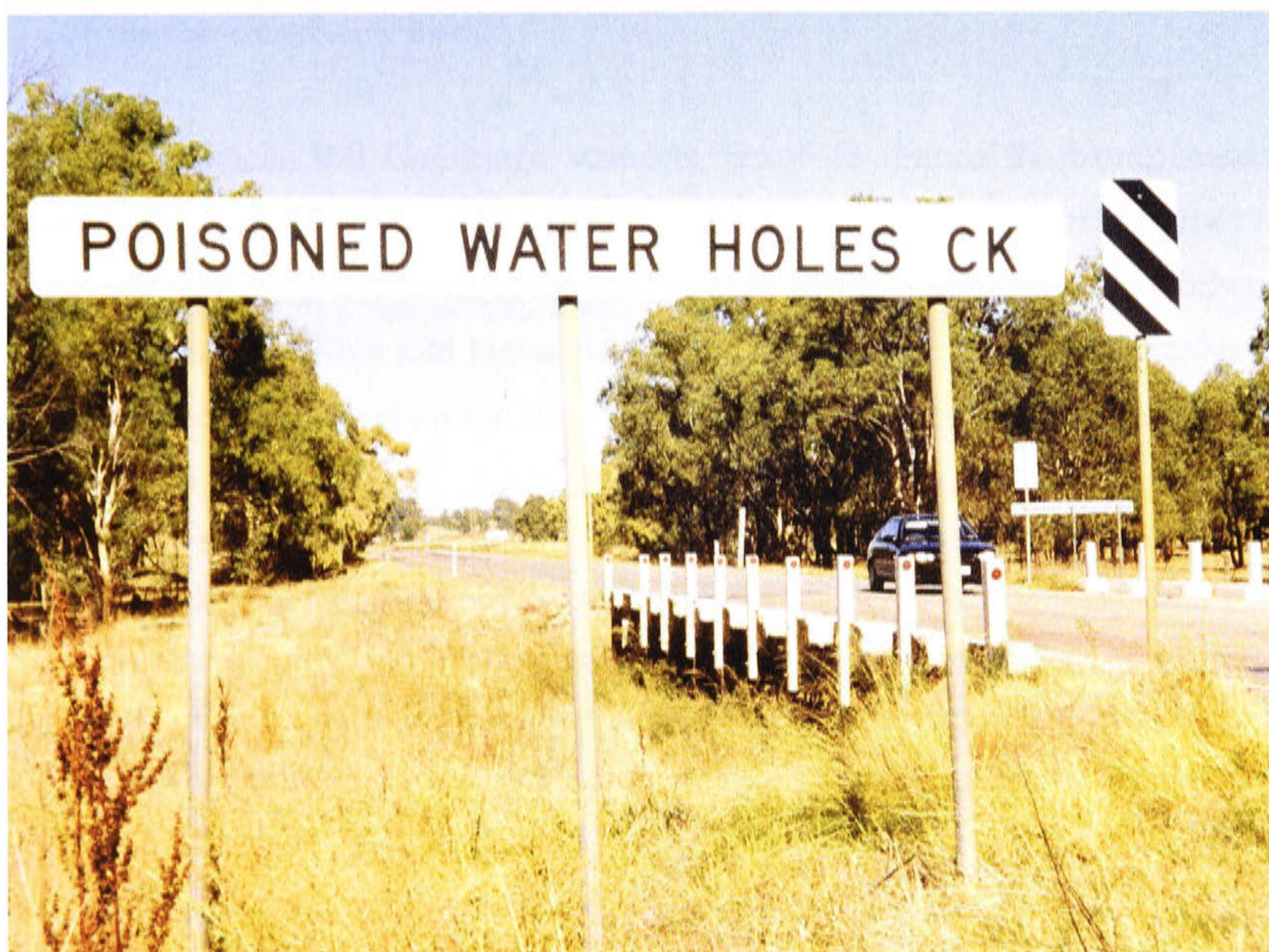
²¹ Jennifer Baldry, *Swords Scythes and Shears: A History of the Sawyers of Bethungra New South Wales and Related Families*, privately published, Wallendbeen, 1989, p. 61.

²² Colonial Secretary's Office, 'Claims to Leases of Crown Land', *Supplement to the New South Wales Government Gazette*, 27 September 1848, p. 1318.

²³ 'Amended descriptions of the Tymora and Rock runs', 15 March 1869, copy held by Jim Main, Cootamundra.

²⁴ Henry Cosby to Edward Deas Thompson, May 1839, State Records NSW, 4/2438.2.

²⁵ Gammage, *Narrandera Shire*, pp. 17-20; 'Ngarrang' denotes a particular lizard species, either a jew lizard (*Pogona barbata*) or the eastern water dragon (*Physignathus lesueurii*). Ngarrangdhuray gave sanctuary to lizards at Narrandera, in the same way Gudhamangdhuray clanspeople nurtured turtle populations at Cootamundra.



Poisoned Waterholes Creek, Narrandera district, April 2001.

daring to go out even the shortest distance from their huts, except in parties of two or three, well armed, & they are obliged to desert their lower stations altogether, finding it impossible to persuade any men to remain at them'.²⁷ A squatter on the Murrumbidgee described to James Gormly how Ngarrangdhuray killed cattle:

The plan the black men adopted was to hide in the reeds that grew on the water's edge, and watch until the cattle went down the steep bank to drink. Then the blacks would range themselves along the top of the bank and spear the cattle that were below them.²⁸

Colonial officials, Bill Gammage suspects, chose to ignore the brutal means taken by squatters to recover control.²⁹ Frank Jenkins arrived in the district in the early 1830s to graze cattle south of Narrandera with his father and brother.³⁰ As an old man, Jenkins told James Baylis that when Ngarrangdhuray clanspeople forced squatters to abandon their Murrumbidgee River pastoral stations,

all the settlers on both sides of the river determined to give them a lesson; so one day they all went out armed and drove the blacks before them, who took refuge on an island thickly overgrown with reeds in the middle of the river, about seven miles up from the town of Narrandera, and here they were shot down in numbers. The island is known as the Murdering Island to this day.³¹

Not every squatter in the area participated in the killings. At the time of the conflict, James Devlin held Ganmain and Deepwater stations, upstream from Narrandera. According to one of his descendants, Devlin abandoned his stations 'owing to the blacks spearing his cattle.'³² Despite his stock losses, the squatter respected the actions of the Ngarrangdhuray:

²⁶ Gammage, *Narrandera Shire*, pp. 32-34.

²⁷ Henry Cosby to Edward Deas Thompson, May 12 1839, State Records NSW, 4/2438.2.

²⁸ James Gormly, *Exploration and Settlement in Australia*, Ford, Sydney, 1921, p. 118.

²⁹ Gammage, *Narrandera Shire*, p. 35.

³⁰ Gammage, *Narrandera Shire*, p. 38.

³¹ James Baylis, 'The Murrumbidgee and Wagga Wagga', *Journal and Proceedings*, Royal Australian Historical Society, vol. 13, 1927, p. 256.

³² James Devlin Sr., Stan Devlin, and Elsie Devlin, *Reminiscences*, privately published volume in the Wagga Wagga City Library, no date.

He would not shoot the blacks himself nor allow any of his men to do so. He said these people were human beings like ourselves, and were only doing what they themselves would probably do under similar circumstances. Mr. Devlin took up some country near Yass at Blackall Range and moved the cattle from Ganmain and Deepwater there.

James Devlin returned to his Murrumbidgee stations when the trouble had passed. The squatter rebuilt relations with surviving Ngarrangdhuray: 'He used to shoot a bullock regularly for the blacks so they would have plenty of food'.³³ In the 1860s, the Devlin family gave Peter, a Wiradjuri elder on Ganmain station, an inscribed brass breastplate.³⁴

Measles, tuberculosis, influenza, and other European diseases undermined Wiradjuri resistance to colonisation. In northern Wiradjuri country in the 1840s, missionary James Günther recorded a local word, 'Gulgog-gulog', meaning 'marks or scars, such as are left by small-pox'.³⁵ Frederick Tompson noticed smallpox scars across the faces of elderly Wiradjuri when he settled beside the Murrumbidgee River east of Wagga in 1832.³⁶ According to local historian Eric Irvin, the disease was active around Wagga in the early 1830s. Frederick Tompson Jr, then eighteen, administered medicine from his father's supplies to Wiradjuri struck with smallpox, until he too became sick with the disease.³⁷ These accounts correspond with records of two smallpox epidemics sweeping eastern and southern Australia—in 1789 and again between 1829 and 1831.³⁸ Economic historian Noel Butlin thought the disease probably killed more than half the Aboriginal populations of some areas. Pustules tore through layers of skin across hands and feet. Hunting and gathering became impossible.³⁹ Recent

³³ Devlin et al., *Reminiscences*.

³⁴ Keith Swan, *A History of Wagga Wagga*, City of Wagga Wagga, Wagga Wagga, 1970, p. 13.

³⁵ James Günther, 'Grammar and vocabulary of the Aboriginal dialect called the Wirradhuri', appendix in Lancelot Edward Threlkeld, *An Australian Language as spoken by the Awakabal*, Charles Potter, Government Printer, 1892.

³⁶ 'The Small-Pox', *Wagga Wagga Advertiser*, 24 February 1869.

³⁷ Eric Irvin, 'A Plea for Regional Histories', *Historical Studies*, vol. 7, no. 26, May 1956, p. 213.

³⁸ Noel Butlin, *Our Original Aggression: Aboriginal Populations of Southeastern Australia 1788-1850*, George Allen and Unwin, North Sydney, 1983, pp. 63-65.

³⁹ Butlin, *Our Original Aggression*, p. 65.

scholarship suggests Macassan visitors to the northern shoreline of Australia brought smallpox to the continent.⁴⁰ Wiradjuri names exist for Torres Strait and Cape York, evidence of trade and ceremonial pathways crossing the continent.⁴¹ With songs and ochres came deadly pathogens.

Other new processes of death worked in less direct ways. Wiradjuri gathered at Wagga and at other centres on the southwest slopes for annual handouts of government blankets.⁴² Across inland southeast Australia, where winters are cold and wet, the practice had tragic consequences. In Gippsland, southeast of Wiradjuri country, George Dunderdale watched Aborigines discard rugs sown from skins of kangaroos, koalas, and possums in favour of government blankets. While skin rugs repelled wind and moisture,

the blankets we kindly gave them by way of saving our souls were manufactured for the colonial market, and would no more resist the rain than an old clothes-basket. The consequence was that when the weather was cold and wet, the blackfellow and his blanket were also cold and wet, and he began to shiver; inflammation attacked his lungs, and rheumatism his limbs, and he soon went to that land where neither blankets nor rugs are required.⁴³

Despite the demands of squatters for control over land, Wiradjuri survivors of violence and disease maintained distinct lifeways. Squatters did not intensively manage their wide pastoral stations. They ran sheep and cattle beside swamps and major waterways, usually with the help of several workers. Extensive pastoralism did not significantly alter grassy woodland ecologies. Stock roamed distant parts of squatting runs only when intermittent creeks and waterholes held enough drinking water. Squatters tolerated Wiradjuri hunting, gathering, and ceremonial activities that did not clash with station operations. In the 1870s, Harry Kavanagh spent part of his childhood at Sebastopol, a gold mining area

⁴⁰ Judy Campbell, *Invisible Invaders: Smallpox and Other Diseases in Aboriginal Australia 1780-1880*, Melbourne University Press, Carlton, 2002.

⁴¹ Gammage, *Narrandera Shire*, p. 18; and see 'Pathways', Chapter Two, for Mary Gilmore's account of Wiradjuri knowledge of northern Australia.

⁴² Sherry Morris, *Wagga Wagga: A History*, Council of Wagga Wagga, Wagga Wagga, 1999, p. 26.

⁴³ George Dunderdale, *The Book of the Bush*, Ward, Lock and Co., London, 1898, p. 269.

between Junee and Temora. He remembered Aboriginal men and women living in the district, a local group of ten. The men worked on stations as shepherds. Some of the Aborigines sold settlers sheets of bark stripped from eucalypts. Colonists used the bark to build huts.⁴⁴ Edgar Beckham estimated that five to six hundred Wiradjuri people lived along and between the Murrumbidgee and Lachlan rivers in 1844. The groups lived relatively independently of squatters:

The Natives have no fixed places of residence, although each tribe have their own particular country and water, which they Seldom leave except for the purpose of waging war or to celebrate some jubilee with a neighbouring tribe. I have generally found the Blacks wandering within what they term their own ground, and most frequently forming their camps in the vicinity of the Settlers' Huts.⁴⁵

Naturalist and travel writer George Bennett visited Murrumbidgee River grazing properties near Jugiong and Gundagai in 1832. He observed Wiradjuri hunting, fishing, and gathering. On Darbylara station, near where the Tumut River joins the Murrumbidgee, Bennett saw Wiradjuri living as they chose:

There were a number of the aborigines about this farm, who made themselves occasionally useful by grinding wheat, and other occupations; but no dependence can be placed upon their industry for they work when they please, and remain idle when they like; the latter being of the most frequent occurrence; but they are encouraged for their valuable assistance in finding strayed cattle, as they track the beasts with an accuracy seldom or never attained by a European.⁴⁶

During the period of relatively peaceful coexistence between settlers and Wiradjuri, pastoralists retained a powerful position. Landholders, it appears, rarely tolerated obstructions to pastoral activities. In her poem 'The Hunter of

⁴⁴ 'Sebastopol in Seventy: Mr. H. M. Kavanagh Tells an Interesting Story', in *Temora's Jubilee Souvenir*, J A Bradley, Temora, 1931.

⁴⁵ Edgar Beckham, 'Report upon the condition, etc., of the Aborigines inhabiting the Lachlan District during the year 1844', in Frederick Watson (ed.), *Historical Records of Australia*, series 1, vol. XXIV, Library Committee of the Commonwealth Parliament, 1925, pp. 267-268.

⁴⁶ George Bennett, *Wanderings in New South Wales*, vol. 1, Richard Bentley, London, 1834, p. 305.

the Black', Mary Gilmore described the activities of a man hired by Riverina squatters to track down and murder troublesome Wiradjuri individuals and groups.⁴⁷ As a child, she heard of the killer working on Mimosa station, southwest of Temora, where he tracked and shot an Aboriginal man for taking a sheep. The unnamed man, Gilmore claimed, slaughtered perhaps a thousand men, women, and children:

Tomahawk in belt, as only adults needed shot,
No man knew how many notches totalled up his lot;
But old stockmen striking tallies, rough and ready made,
Reckoned on at least a thousand, naming camps decayed.

Wiradjuri faced new challenges as agriculture began to replace pastoralism across the southwest slopes in the 1860s and 1870s. In 1861, the Legislative Council of New South Wales approved a number of bills designed to loosen the exclusive grip of squatters over land. The legislation, collectively called the Robertson Land Acts after reformist politician John Robertson, did not apply to inland districts until 1866.⁴⁸ In the same year, Donald and Mary Cameron moved to the Riverina from the Crookwell district on the southern tablelands.⁴⁹ Their first child, Mary, was less than a year old. Donald Cameron worked as a stockman and builder on pastoral stations near Coolamon, Wagga, Junee, and Temora. With a growing family, Donald and Mary eventually settled near Brucedale north of Wagga in 1874. Donald Cameron deeply respected Wiradjuri people and their knowledge. Senior clansmen showed him how they tended local ecologies. Cameron and his daughter Mary had a close relationship. Listening to Donald Cameron, and engaging with Wiradjuri herself, the young girl grasped some of the intricacies of Wiradjuri ecological understandings. Later in life, as Mary Gilmore, the renowned poet and writer recorded detailed childhood memories of the Riverina.

⁴⁷ Mary Gilmore, 'The Hunter of the Black', in *The Passionate Heart and other poems*, Angus and Robertson, 1969 [1948], pp. 66-68.

⁴⁸ G L Buxton, *The Riverina 1861-1891: An Australian Regional Study*, Melbourne University Press, Carlton, 1967, p. 148.

⁴⁹ Wilde, *Courage a Grace*, pp. 26-31.

Mary Gilmore's reminiscences describe a dramatic turning point in the ecological and social history of the southwest slopes. For decades, Wiradjuri had lived with a degree of freedom alongside pastoralists on extensive grazing stations. In the 1860s and 1870s, closer settlement legislation and the arrival of the railway brought profound change. Town growth and agricultural development displaced Wiradjuri from station camps and waterways. Clanspeople could no longer tend and maintain the lively patterns of grassy woodlands and swamps. With sadness, the Cameron family saw the social and ecological consequences of intense agricultural development unfold. Like other Aboriginal groups across Australia, Wiradjuri clans reserved places where no hunting, fishing, gathering, or burning was allowed.⁵⁰ The sites held special religious and social significance. Animals and plants flourished inside the sacred refuges, spreading beyond sanctuary boundaries in good seasons to replenish populations legally available for hunting and gathering. According to Gilmore, Wiradjuri reserved Parkan Pregan lagoon on the Murrumbidgee floodplain at North Wagga for pelicans (**gulambali**, *Pelecanus conspicillatus*), swans, and cranes (possibly **yambil**, **gungarung**, **gundaru**, **bulun**, *Egretta novaehollandiae*, *Ardea alba*). Westward, on Deepwater and Ganmain stations, Ngarrangdhuray clanspeople managed swan and duck sanctuaries:

The law of sanctuary in regard to large or wide breeding-grounds, such as Ganmain and Deepwater, where once there were miles and miles of swamps (as also down near Deniliquin), was that each year a part of the area could be hunted or fished, but not the same part two seasons in succession.⁵¹

Sanctuary regulations fostered vast populations of various species.⁵² Often as a child, Gilmore heard thunder in a cloudless sky. She remembered running terrified to her mother:

⁵⁰ Rose, *Nourishing Terrains*, p. 49; and see Introduction.

⁵¹ Gilmore, *Old Days: Old Ways*, p. 118.

⁵² Gilmore, *Old Days: Old Ways*, p. 117.

And she would tell me it was swans in the distance beating their wings as they readied for flight. Later on I learned to recognise the sound, and to listen to it unafraid.⁵³

Graziers thought immense flocks of swans nesting at Wiradjuri sanctuaries a great nuisance. Reeds polluted by the birds repelled cattle from drinking places. As livestock ate feathers trapped in grass, feather-balls gathered in their stomachs, eventually killing them. Concentrated populations of swans, Gilmore noted, enriched the soil and naturally boosted its productivity. Squatters did not recognise or value the ecological offerings of the swans, and rejected Wiradjuri sanctuary regulations in brutal style. Mary Gilmore wrote of 'the swan-hoppers'.

Their work was to hop the swans off the nests in the breeding-season, and smash the eggs. It was filthy work; they reeked of the half-hatched and the ad-dled, and their trousers grew stiffer and stiffer, and filthier and filthier, as the yolks and the whites of the smashed eggs set in the material of which they were made.

The old cattle town of Wagga Wagga once had its swan-hoppers on all the stations round about; and the more they stank the prouder they were.⁵⁴

Wiradjuri tended open eucalypt woodlands of relatively moist, soft earth cloaked in kangaroo grass (**gaymaan**, *Themeda triandra*), wallaby grasses (*Austrodanthonia* spp.), and snow grass (*Poa sieberiana*). Chocolate lilies, leopard orchids (*Diuris pardina*), yam daisies (**bading**, **murnang**, *Microseris lanceolata*), and other herbs with edible tubers flourished amid grass tussocks, across spaces regularly opened by flame. On one occasion during her childhood, as the ground surface cooled after the passage of fire, Mary Gilmore watched the 'extensive planting of seed'. Wiradjuri women gathered seed from shrubs and grasses. Gilmore helped collect heads of grass seed. Heads were rubbed then

⁵³ Mary Gilmore, *The Passionate Heart*, p. 307.

⁵⁴ Gilmore, *Old Days: Old Ways*, p. 168.

shaken in a bark container to separate grain from husks. 'The separated seed was sorted', explained Gilmore,

the unsound or small rejected and the best planted in the burnt area but very lightly covered. It was not scattered, it was put in in small pinches so that if some failed there would still be enough for a tussock.⁵⁵

A Wiradjuri woman once scolded Mary Gilmore for spitting out the seed of an unusually large 'ground-berry'. The woman searched the grass to find the seed, 'so that it could be put back where it originally came from and a strong plant grow from it.'⁵⁶ Wiradjuri planted seeds of quandongs (**guwandang**, *Santalum acuminatum*). The small trees with pale, narrow leaves produce large red fruit. Near Bethungra, Gilmore watched Wiradjuri pollinate quandong blossoms with flowering branches carried from another grove. Elsewhere, she saw branches left under quandong trees to indicate the pollinating work did not need repeating.⁵⁷ As with the selection and planting of large ground-berries and grass seeds, Wiradjuri used cross-pollination techniques to favour highly productive quandong strains. A cousin of Mary Gilmore wore a necklace of particularly large quandong stones harvested from trees on Malebo Hill, north of Wagga. The trees, Gilmore noted, 'were among those specially crossed and bred' by Wiradjuri.⁵⁸

Mary Gilmore remembered birds hopping along ant trails after rain showers, beaking water pooled on the bare surfaces. Soil compacted by the passage of countless generations of ants held shallow threads of water for short periods. Ant trails became rare temporary reservoirs in dry country beyond rivers and major creeks and swamps. Wiradjuri taught Gilmore and her siblings never to destroy ants or pathways trodden by the tiny insects. Grass tussocks grew bigger and stayed green longer beside ant tracks.⁵⁹ Moisture seeped down, water-

⁵⁵ Gilmore, *Old Days: Old Ways*, pp. 153-154.

⁵⁶ Gilmore, *Old Days: Old Ways*, p. 154.

⁵⁷ Gilmore, *Old Days: Old Ways*, pp. 154-155.

⁵⁸ Mary Gilmore, 1940 diary, National Library of Australia, manuscript collection, MS 614, entry for 12 February 1940.

⁵⁹ Gilmore, *The Passionate Heart*, p. 315.



Road sign, Brucedale district, north of Wagga, April 2001.

ing the deep roots of perennial grasses. On the southwest slopes, colonists encountered living systems tended and shaped by people. Wiradjuri were agents of ecological connectivity. Subtle action informed by intimate understanding kept land strong and naturally productive. Ecological stability and resilience secured Wiradjuri against the effects of drought and other dramatic natural events.

In the final decades of the nineteenth century, as farmland spread and settlement intensified, Wiradjuri could no longer enforce sanctuary law or maintain established ways of engaging with country. The Cameron family witnessed a decline in the natural productivity and bounty of land and river systems. Even though fewer people lived beside the Murrumbidgee River than before colonisation, fish and freshwater lobsters became scarce.⁶⁰ Settlers engaged with local ecologies differently to Wiradjuri. Sometimes deliberately and sometimes unwittingly, the newcomers restricted rather than promoted natural diversity and abundance:

I do not remember in just what year it was, but the chief of the tribe at Wagga Wagga in talking to my father, said that, white settlement increasing along the river, it was not only fished in by the settlers, but fished in season and out, so that the breeding-stocks were diminishing as well as the grown fish which the blacks' laws allowed them to take for sustenance.⁶¹

When Mary Gilmore first knew Parkan Pregan lagoon beside the Murrumbidgee at North Wagga,

it was simply covered with pelicans, teal, duck, cranes, and swans; but being specially a pelican sanctuary, these birds predominated. When I first went to the Wagga Wagga school, as we trudged in from Brucedale Road, where I remembered clouds of them there were seventy only, then forty, then twenty,

⁶⁰ Gilmore, *Old Days: Old Ways*, pp. 117-118; and see 'Stories of inevitability', Chapter Three.

⁶¹ Gilmore, *Old Days: Old Ways*, p. 140.

then four, and then there were no pelicans at all. The swans went till there were but two; the ducks came only at night—the few that survived.⁶²

Wiradjuri complained to Donald Cameron about the destruction of native animal populations by settlers.⁶³ Cameron listened and acted. He argued for the maintenance of Wiradjuri sanctuaries on Deepwater and Ganmain stations, 'to be held as such in perpetuity for the people.'⁶⁴ Cameron and several other Wagga men tried to enforce the wide boundaries of an emu sanctuary on Eunonyhareenyha station, northeast of Wagga.⁶⁵ 'Eunonyhareenyha', according to Mary Gilmore, meant 'the breeding place of the emus'. For a short while, the men convinced people not to shoot emus on Eunonyhareenyha, or to hunt there with dogs at nesting time. When Donald Cameron counted the once numerous emu flock inside the sanctuary, only three hundred birds remained. 'Then', wrote Gilmore, 'the town growing, and land-settlement increasing, there was objection made that one of the sweetest spots for grazing should be set aside for birds, when selectors could farm and make homes there.' The Department of Lands opened to selection the part of Eunonyhareenyha 'semi-reserved' for emus. Donald Cameron spoke with the station manager, who then arranged the erection of notices banning shooting and forbidding dogs on the station. 'Unluckily the eggs were forgotten', wrote Gilmore of the notices,

so next year when we drove out to see them there were only about half a dozen flocks of young birds to be found in the whole area. The nests had been raided everywhere.

Donald Cameron made other attempts to reserve land for wildlife. His daughter remembered him returning home excited one evening, 'saying that the larks were coming back again.'⁶⁶ On a grassy flat beside Houlaghans Creek, northwest of Wagga, Donald Cameron had counted a hundred groundlark (possibly *dinbuwurin*, *Anthus novaeseelandiae*) nests. Flocks of groundlarks nesting

⁶² Gilmore, *Old Days: Old Ways*, p. 119.

⁶³ Gilmore, *Old Days: Old Ways*, p. 152.

⁶⁴ Gilmore, *Old Days: Old Ways*, p. 119.

⁶⁵ Gilmore, *Old Days: Old Ways*, pp. 118-120.

⁶⁶ Gilmore, *The Passionate Heart*, pp. 317-318.

among tussocks had vanished in recent years, as agricultural development erased and modified grassy woodland. Gilmore recalled how the brown, mottled birds shot into the air when disturbed, and 'glittered like sparks in the sun, as they mounted and sang in their myriads.' Cameron built a log fence around the creek flat to exclude horses and cattle. Grass tussocks thickened, sheltering the nesting larks. A road passed the site. Travellers noticed the dense grasses, and put horses inside the enclosure to graze. Cameron found the nests trampled, the air above empty and silent. The event pained him:

After that father went by a different road to town. He had loved the larks, and they were gone. As to the fence, it became a neighbour's firewood.



Between Wallendbeen and Stockinbingal, Congou Hill rises from a patchwork of crops and pasture. Bush cloaks the southern and western sides of the tall, rocky feature. I turned off the road and parked under the shade of yellow box trees. An open paddock lies between the roadway and dark forest on the hillside. I opened and closed a wide gate and walked with my dog along a farm track crossing the paddock. Startled ewes and lambs bleated on the other side the fence. I noticed a house nearby, over the creek, nestled inside a garden. No one had driven on the trail we followed for some time. The twin sandy ribbons were unmarked by tyres, groomed by wind and rain.

The slope steepened. We left the track and entered the bush. Yam daisies and waxlip orchids (*Glossodia major*) flowered beneath red stringybarks (**gundhay**, *Eucalyptus macrorhyncha*) and white box trees (**birri**, *Eucalyptus albens*). We climbed to the top and rested on a jumble of boulders, behind a screen of hickory wattle (**gidya**, *Acacia implexa*) and black cypress. The stone cairn of a trig station stands on the highest point of Congou Hill. A timber beam holds interlocked iron disks aloft, punctured by shotgun pellets and scratched with graffiti. I gazed north and east, across rectangles of green pasture and crops of golden, flowering canola.

Early surveyors marked Congou Hill on the boundary of Wallendbeen squatting run.⁶⁷ Troubled relations between Wiradjuri and settlers threatened to undermine the viability of grazing on parts of the southwest slopes when Alexander Mackay came to manage Wallendbeen for an absentee owner in the early 1840s.⁶⁸ Throughout 1843, the *Sydney Morning Herald* reported, Aborigines 'slaughtered, speared, or carried off far into the bush' almost an entire herd of six hundred cattle on Bogolong station, in hilly country southeast of Wallendbeen near the Murrumbidgee River.⁶⁹ In 1844 Edgar Beckham, local Commissioner of Crown Lands, noted that squatters supplied provisions to Wiradjuri, 'which tends much towards keeping the natives from Spearing and driving off the Cattle from their runs, and consequently prevents any disputes or collisions between the Settlers and Aborigines.'⁷⁰

According to Sarah Musgrave, Alexander Mackay presented a brass breastplate to a senior local Wiradjuri man, 'King Congo of Wallendbeen'.⁷¹ Perhaps the gift helped consolidate a carefully negotiated relationship initiated by Mackay to ensure his cattle and stockmen remained safe from spears. Around Wallendbeen and Stockinbingal, it appears that relations between settlers and Wiradjuri were turbulent for years. In the early 1830s, Ned Ryan based himself at Galong to the east, and was the first to graze stock around Wallendbeen.⁷² 'Ryan had a lot of trouble with the blacks', wrote Frank Clune after speaking with Donald Mackay, Alexander's son. Ryan abandoned his western holdings around Cootamundra and Wallendbeen.⁷³ Absentee squatter John Hurley took up Cootamundra run in the late 1830s. His men grazed stock in 1839 around Con-

⁶⁷ Colonial Secretary's Office, 'Claims to Leases of Crown Land beyond the Settled Districts. Lachlan District', *Supplement to the New South Wales Government Gazette*, Wednesday, 27 September 1848, p. 1315.

⁶⁸ Richard Littlejohn, *An Australian Pioneer: Alexander Mackay 1815-1890*, privately published, Wallendbeen, 1992, p. 20.

⁶⁹ 'The Southern Districts', *Sydney Morning Herald*, 30 January 1844; and 'Aborigines', *Gormly Index*, Charles Sturt University Regional Archives, Wagga.

⁷⁰ Edgar Beckham, 'Report upon the condition, etc., of the Aborigines inhabiting the Lachlan District during the year 1844', in Watson, *Historical Records of Australia*, pp. 267-268.

⁷¹ Musgrave, *The Wayback*, p. 17.

⁷² Littlejohn, *An Australian Pioneer*, p. 20.

⁷³ Frank Clune, *Last of the Australian Explorers: The Story of Donald Mackay*, Angus and Robertson, Sydney, 1942, p. 17.



View northeast from Congou Hill, Stockinbingal district, October 2001.

gou Creek, beside Congou Hill, but were forced to retreat 'owing to the depredations of the blacks', explained Kenneth Mackay, Donald's brother.⁷⁴ The land Congou Creek drains is particularly productive. Alexander Mackay quarrelled with neighbouring squatters for exclusive rights to graze stock there. Mackay thought a parcel of land around Congou Hill 'certainly worth contending for as it was capable of depasturing 4 000 sheep'.⁷⁵

Perhaps the man known as 'King Congo' belonged to the same Wiradjuri clan that forced Ryan and Hurley to withdraw. Exchange and negotiation were probably not the only methods squatters used to secure the grassy slopes of the Stockinbingal and Wallendbeen districts for grazing. Congou Creek flows northwest from Congou Hill and enters the Bland downstream from Stockinbingal. A reporter journeyed down the Bland Creek in 1879. Up to four hundred Wiradjuri people once gathered beside a waterhole on Morangarell station for ceremonies, the journalist learned. 'Of this large aboriginal population there remains but one survivor, old black Peggy, who clings to her ancestral home with a tenacity which nothing but death will sever'.⁷⁶ Mary Morton grew up in the Grogan district, on the Bland between Stockinbingal and Morangarell, where her father established a farm in 1911. She told me of one early Grogan landholder known for 'hunting the Aborigines'.⁷⁷ Steel Caldwell, a Morangarell district pastoralist, also had a dark reputation. 'For many years, it is said', wrote local historian Veronica McNamara, 'he kept a photo-lithograph of himself and a number of men hanging two blackfellows from the limb of a tree: The offence...butchering a sheep'.⁷⁸ McNamara was told of atrocities committed by settlers alongside Burrangong Creek, a waterway flowing into the Bland downstream from Morangarell:

The natives were very plentiful in this fertile neck of the woods, and the cruelty they suffered from the hands of the settlers in that area was appalling. One hears stories of setting strychnine baits—when the death was too long, and lin-

⁷⁴ Kenneth Mackay, 'Pioneers of 1837-60', *Sydney Mail*, 3 January 1923.

⁷⁵ Draft of letter from Mackay to Edwards, 4 March 1849, Baldry family papers.

⁷⁶ 'A Tour Through the Pastoral District of the Bland', *Cootamundra Herald*, 11 January 1879.

⁷⁷ Mary Morton, conversation at Narraburra Lodge, Temora, 11 October 2002.

gering. Arsenic was put in the treacle, which the natives were very fond of. It is said: that after going around one trail, the dead counted, amounted to two hundred.⁷⁹

From Congou Hill I gazed northwest towards the Bland Creek. Afternoon sun cast shadows of eucalypt trunks over the loose forest floor as I began climbing down the slope. Beyond the bush, I put my dog on the lead and rejoined the sandy path leading to the public road. With a mild jolt I noticed fresh tyre tracks. My father had warned me about walking in paddocks with the dog: 'If they see her running about, chasing sheep, they'll shoot her.' It seemed someone did notice us crossing the open paddock an hour or so earlier, perhaps from the nearby house. At the road near my parked car I pushed the gate closed, fastened the chain, and walked away from the grassy paddock, fenced and secure.

'Fighting timber'

Alec Hansen suggested we meet early at Jindalee State Forest, on the quartz and shale ridge dividing the Murrumbidgee and Lachlan river basins. I parked beside ironbarks and Cootamundra wattles. Alec was already there, under the trees, taking interest in something particular. Leaves and bark crunched as we lifted ourselves over the fence and walked up the stony slope. Alec told me these forested hills once looked very different. In the late 1940s, Alec worked in the kitchen of the Silver Star café in Cootamundra, owned by his cousins. About once a month, two retired farmers arrived by train from Stockinbingal and ordered lunch at the café. From an early age, Alec has taken a deep interest in natural history and the bush. He asked the elderly men what the country looked like when they were young. There was no forest across the Jindalee hill-

⁷⁸ Veronica G. McNamara, *Beyond the Early Maps*, privately published, Orange, 1974, p. 177.

⁷⁹ McNamara, *Beyond the Early Maps*, p. 94.

sides in the 1860s, they told Alec. Stock grazed a grassy expanse interspersed with ancient eucalypts. Some of the old trees had trunks eight feet wide.⁸⁰

Alec knew a place in the forest where, years before, workers felled a huge tree with a crosscut saw. The old stump was low and much wider than trunks of trees growing there now. Alec returned to the stump at Jindalee. He stepped out in different directions from where the tree once stood and discovered evidence of other giant eucalypts. Signs of vanished trees lay roughly one hundred yards apart. Half a stump remained in some cases. Elsewhere he found broad depressions scattered with charcoal and ringed with earth uplifted by root systems.

According to historian Eric Rolls, Aborigines on the northwest slopes of New South Wales regularly burned patches along grassy creek flats. Hunters speared kangaroos and emus drawn to sweet regrowth rising from burnt surfaces.⁸¹ Missionary James Günther recorded several Wiradjuri words associated with land burning practices. 'Bimbarra' meant 'to set the grass on fire', while 'bim-bai' signified 'a spot where the grass has been burnt.'⁸² In 1848, explorer Thomas Mitchell described how Aborigines used fire to maintain open grassy woodlands across inland slopes and plains:

Fire, grass, kangaroos, and human inhabitants, seem all dependent on each other for existence in Australia; for any one of these being wanting, the others could no longer continue. Fire is necessary to burn the grass, and form those open forests, in which we find the large forest-kangaroo; the native applies that fire to the grass at certain seasons, in order that a young green crop may subsequently spring up, and so attract and enable him to kill or take the kangaroo with nets. In summer, the burning of long grass also discloses vermin, birds' nests, &c., on which the females and children, who chiefly burn the grass, feed. But for this simple process, the Australian woods had probably contained as thick a jungle as those of New Zealand or America, instead of the open forests

⁸⁰ Alec Hansen, conversation at Cootamundra, 24 April 2001, and at Jindalee State Forest, 23 October 2001.

⁸¹ Eric Rolls, *A Million Wild Acres*, Penguin Books, Ringwood, 1984, p. 164.

⁸² Günther, *An Australian Language as spoken by the Awabakal*, p. 73.

in which the white men now find grass for their cattle, to the exclusion of the kangaroo, which is well-known to forsake all those parts of the colony where cattle run.⁸³

Open grassland peppered with trees and shrubs, as remembered at Jindalee and reimagined by Alec Hansen in the 1940s, cloaked most of the southwest slopes when inland colonisation began. In the middle decades of the nineteenth century, surveyors and government officials often made observations like 'Good Grassy Open Forest', 'Extensive Flat, Thinly Timbered', 'Good open forest (Box, Gum, Wattle)', and 'Open country suitable for agriculture'.⁸⁴ Grassy woodlands began to change as squatters introduced domestic stock and Wiradjuri burning practices ended. James Gormly came to the Murrumbidgee region in the 1840s. 'I have been fighting timber all my life', he told commissioners of a government forestry inquiry in Wagga in 1908.⁸⁵ Gormly considered yellow box the hardest tree species to kill. The eucalypt regrew swiftly, and some patches required repeated clearing. The absence of fire seemed to give seedlings a chance to grow. Wagga land agent Leonard Fosbery described ecological responses witnessed on pastoral holdings extensively ringbarked in the 1870s. Intense and regular stocking had denuded these properties of grass. Fire could no longer sweep the bare paddocks, and germinating white cypress pine (*garraa*, *Callitris glauco-phylla*) grew unchecked.⁸⁶ 'I have seen the growth of the whole of the pine forests of the Riverina', James Gormly told the commissioners. In the early days pine was a rare sight. 'That shows how nature will assert itself', Gormly declared:

Only give the forests an opportunity and they will re-afforest themselves. I have seen land which had been cultivated for thirty years, and when let run to grass there has been millions of seedlings shoot up as thick as wheat ... I have

⁸³ Mitchell, *Journal of an Expedition into the Interior of Tropical Australia*, pp. 412-413.

⁸⁴ Edgar Beckham, itinerary, March-February 1846, State Records NSW, reel 2748; James Larmer, 1848 field book, State Records NSW, 2/8070.1; Edward Twynam, 1860 field book, State Records NSW, 2/8091.7; and C Bolton, 'Plan of features in neighbourhood of Eurongilly', 1865, State Records NSW, item 3465.

⁸⁵ Royal Commission of Inquiry on Forestry, *Minutes of Proceedings, Minutes of Evidence, and Appendix*, Part II, William Applegate Gullick, Government Printer, Sydney, 1908, p. 535.



White cypress pine, Retreat, Dirnaseer district, April 2001.

had country in the Riverina where the timber growth has absolutely starved me out, and I have been forced to abandon the country because I could not keep the timber down.⁸⁷

Regenerating forests of eucalypts and other woody plants unnerved settlers. In 1881, a group of pastoralists on the southwest slopes sent a petition to the Legislative Assembly of New South Wales. Responding to the vigorous spread of white cypress pine, the men asked for help in 'exterminating this powerful enemy of the State and its subjects'.⁸⁸ Early colonists of the Temora district 'faced unknown and constant peril', wrote local historian Rob Webster in 1950,

not only from the aborigines, who had to be skilfully handled, nor from the shattering change of season from drought to flood which a young and unprepared country must face, but also from the unremitting imprisonment and separation caused by the thick and dangerous bush which surrounded them for mile upon mile on every side.⁸⁹

Settlers used the technique of ringbarking to clear land of trees. With a sharp axe they cleaved a ring of sapwood from the trunk of each tree. Above the wound, where sap could no longer rise, the tree wilted and died. Eucalypts are resilient plants, and usually produced fresh shoots beneath debarked rings. In 1908 George Sutton, manager of the Government Experimental Farm near the Lachlan River at Cowra, northeast of Young, advised new farmers on the western slopes of the necessity to remove the 'suckers' and avoid the regeneration of ringbarked trees. Axes were again employed to shave away emerging branches and leaves. To ensure the death of trees, farmers sometimes had to undertake the 'suckering' operation three times, Sutton explained.⁹⁰ Occasionally there was

⁸⁶ Royal Commission of Inquiry on Forestry, *Minutes of Proceedings, Minutes of Evidence, and Appendix*, p. 536.

⁸⁷ Royal Commission of Inquiry on Forestry, *Minutes of Proceedings, Minutes of Evidence, and Appendix*, p. 535.

⁸⁸ Legislative Assembly of New South Wales, 'Clearing Pine and Scrub from Leased Lands', *Votes and Proceedings*, vol. 3, Legislative Assembly of New South Wales, Sydney, 1881, pp. 252-266.

⁸⁹ Rob Webster, *The First Fifty Years of Temora*, J A Bradley & Sons, Temora, 1950, p. 13.

⁹⁰ George L Sutton, *Wheat-growing in New South Wales*, William Applegate Gullick, Government printer, Sydney, 1908, pp. 12-13.

no need to return and remove suckers. According to a practiced land clearer writing in a 1939 edition of *The Pastoral Review*, wet and stormy summers were ideal for ringbarking: 'Followed by a crisp cold winter, there seems to be less chance of regrowth in any form'.⁹¹

Decades before William Farrer built an international reputation in wheat breeding early in the twentieth century, the scientist published a paper explaining the advantages of ringbarking for sheep farming. Ringbarking, Farrer proposed, allowed graziers to boost sheep numbers fourfold. Sheep grew more wool on ringbarked country than in forested areas,

for, not only will ring-barking have allowed more grass to grow, but as the sun will now be able to get at it freely, it will be made nourishing, and will contain more of the wool-forming nutriment; and where, in all likelihood, a less quantity of poor sour grass grew, there will now be a larger supply of good, sweet, nourishing pasturage.⁹²

Farrer cautioned against excessive ringbarking. Trees gave shelter to stock, and attracted rain. He suggested that 'here and there' graziers should save 'for ornament any well-shaped trees, or any trees that are valuable for their timber—to leave the country, in fact, wooded like an English park.'⁹³

George Sutton agreed with Farrer that ground 'sweetened' as leaves and bark dropped from dying trees and bolstered the mineral and organic content of soil, and as sunlight swept the ground. Sutton suggested farmers graze ringbarked country as they waited for stricken trees to die. Several years on, dead trees stood in soil ready for cropping.⁹⁴ At Mimosa, southwest of Temora, a local blacksmith invented the 'Forest Devil', a mechanical device for removing stumps and pulling down ringbarked trees.⁹⁵ One winter evening in 1884, after

⁹¹ 'The Value of Ringbarking', *The Pastoral Review*, 15 July 1939, p. 767.

⁹² William Farrer, *Grass and Sheep-Farming*, William Maddock, Sydney, 1873, p. 65.

⁹³ Farrer, *Grass and Sheep-Farming*, p. 41.

⁹⁴ Sutton, *Wheat-growing in New South Wales*, p. 14.

⁹⁵ D J Halliday, *The Wheat-Growers of South-Western New South Wales to 1914*, MA thesis, Department of History, University of Sydney, 1962, p. 111.



Ringbarked eucalypt, Wagga district, November 2001.

a day of ploughing matches, several hundred people witnessed the trial operation of a Forest Devil on a farm near Cootamundra. Men fastened long chains to a dead tree and adjusted a lever. Within eight minutes the tree was down. 'These machines are a wonderful improvement', the *Cootamundra Herald* exclaimed, 'and no farmer who has much land to clear should be without one.'⁹⁶ Using a Forest Devil, three workers could remove thirty trees a day. Farmers made cleared paddocks ready for ploughing by 'grubbing' out stumps and roots. Some left the roots in the ground and used a 'stump jump' plough. The 'more careful farmers', George Sutton observed, did not advocate this faster, cheaper method of clearing and farming.⁹⁷

Ringbarked forests turned dead and grey across the western slopes of New South Wales late in the nineteenth century as agricultural settlement intensified. Farms and towns emerged beside stands of dead trees and remnant woodland. Mary Gilmore recalled one paddock of 'Riverina red earth which cracked and crumbled, bone-dry in the heat', where the hole of a trapdoor spider descended between tussocks of native grass. A wheat crop grew nearby, and bushland remained beside grey stands of dead trees:

Near where the trap-door spider dwelt, the Willy Wag-tail used to swing, like a swaying leaf, on a clod in the long dry furrow of an adjacent wheat paddock which ran down to a shallow creek where water flowed only when rain was heaviest. In spring the cockatoos watched that field in its sprouting green, massed in clusters on dry ring-barked trees which had not yet been grubbed, and, at sight or sound of a gun, flying to the shelter of the bush behind the fences.⁹⁸

Retired farmer Ian Thompson farmed land west of Temora, on country once part of Mimosa station. He told me a story about his grandmother, Caroline MacLennan, who regularly played the organ at the local church, a small weath-

⁹⁶ 'New tree-extractor', *Cootamundra Herald*, 2 August 1884.

⁹⁷ Sutton, *Wheat-growing in New South Wales*, p. 14.

⁹⁸ Mary Gilmore, *Hound of the Road*, Angus and Robertson, Sydney, 1922, pp. 44-46.

weatherboard building among paddocks and ringbarked trees.⁹⁹ One evening, his grandmother walked away from her farmhouse towards the church, about a mile away. As darkness fell, she lost her way inside a stand of ringbarked eucalypts. Neighbours travelling to the service spotted her lantern moving amid the dead wood. They found her confused, disoriented by the uniform tangle of grey trunks and broken limbs, and escorted her to the church. That evening, Caroline MacLennan recovered herself and took her place behind the church organ.



A groomed paddock separates a stand of remnant forest from the busy road southwest of Bethungra. Ringbarkers worked here generations ago. Old stumps and fallen timber lie beside weathered trunks persisting upright. Maybe the ringbarking team never returned to cleave away suckers emerging below axe wounds. Elderly box trees grow among the dead wood. Open paddocks stretch away from the few hectares of live trees and rotting wood. Ian Thompson said many farms once had ringbarked forest remnants like this one. Draught horses grazed native grasses and herbs between the dead trees and fallen timber. Ian was sorry to see the forest remnants vanish as more intensive and mechanised farming systems emerged after World War Two. Paddocks of dead trees, fallen timber, and grass tussocks gave refuge to small marsupials and ground-dwelling birds.¹⁰⁰

The stand of old box trees once joined a forest cloaking the Bethungra squatting run. Frank Cowley told a visiting journalist his station was 'a complete wilderness' when he purchased the property in 1876. Cowley amassed money working as a contract surveyor on the Great Southern Railway extension south through Bethungra towards Albury. He decided to become a grazier. Despite a procession of dry years since taking up Bethungra station, the journalist noted, Frank Cowley had 'worked steadily onward—fencing, building, conserving wa-

⁹⁹ Ian Thompson, conversation at Leewood, Temora district, 10 March 2002.

¹⁰⁰ Ian Thompson, 10 March 2002.

ter, ringbarking, and clearing—undeterred by all sorts of difficulties, until now his estate is a pleasure to behold.’ Government policies encouraged land clearing. Legislation introduced in 1881 deemed ringbarking an ‘improvement’. Cowley and other pastoral leaseholders could claim compensation from farmers who selected ringbarked parts of his station.¹⁰¹ Frank Cowley built a handsome redbrick homestead for his family on a sharp rise near the railway line, and renamed the grazing run Bethungra Park. Cowley’s property was considered ‘one of the most highly improved’ in southern New South Wales.¹⁰²

Decades later, Bethungra Park appeared in *The Pastoral Homes of Australia*, an expensive publication exploring the histories of well-known grazing stations.¹⁰³ Charles Westmacott bought Bethungra Park in 1898. Once forested, the station ‘has all been ring-barked’, the author explained. More than eight hundred hectares were cleared of dead trees, ready for the plough. ‘The boundaries are wire-netted, and the run is subdivided into five blocks, also securely netted’, readers learned. One photograph shows four draught horses dragging iron harrows across a bare paddock beside a stand of ringbarked trees. A worker walks behind the team as wind carries dust aside. Other photographs show merino sheep, iron sheds, and white box trees. In several images, steep ranges dense with eucalypts curve across the skyline.¹⁰⁴

The Pastoral Homes of Australia paid homage to ‘those courageous men who faced the bush when it was as the first white men found it.’ These ‘venerable pioneers’ had ‘actually seen, or have heard their forebears tell of the days before railways pierced the bush.’ They were men who ‘got their stock together and penetrated a lonely land’. In the early years there was ‘no noise of warfare’ across the inland, though ‘a conquest was none the less achieved’, as men steadily and quietly triumphed ‘against nature’s silent forces.’ Aborigines had ‘caused much suffering and trouble’ for a short period, ‘but they quickly faded

¹⁰¹ Brett J Stubbs, ‘Land Improvement or Institutionalised Destruction? The Ringbarking Controversy, 1879-1884, and the Emergence of a Conservation Ethic in New South Wales’, *Environment and History*, vol. 4, no. 2, June 1998, p. 149.

¹⁰² ‘Our Studmasters. Mr. Frank Cowley, Bethungra Park’, *Sydney Mail*, 13 December 1884.

¹⁰³ Pastoralists’ Review Pty Ltd, *The Pastoral Homes of Australia*, Sydney, 1910.

¹⁰⁴ Pastoralists’ Review, *The Pastoral Homes of Australia*, pp. 245-256.

away', and their demands and actions were easily forgotten. Barriers to progress did not daunt the pioneers. Hard work and ingenuity eventually gave rewards:

Lack of water was one of the early obstacles to be overcome and this volume bears witness to the success achieved. Then there was the bush, the heavy gum trees which would not permit grass to grow underneath them. But they were in time replaced by grass, not by hewing down each tree as is necessary in nearly every other country but by simply nicking out a circle of bark from around each trunk. When the timber died, grass and nutritious herbage at once appeared and the carrying capacity of the country was increased immeasurably.¹⁰⁵

'Clearing has been a major factor in the progress of Australian agriculture', renowned agricultural scientist Colin Donald observed in 1982.¹⁰⁶ Donald described how the nature of land clearing changed dramatically after World War Two. Landholders abandoned labour intensive practices like ringbarking and instead used bulldozers, bulky chains drawn between tractors, and new industrial poisons. Mechanised farming systems developed by agricultural scientists and technologists in league with farmers drew immediate and substantial income from land cleared of remaining grassy woodland plants. Scientists advised farmers to sow imported pasture species and apply superphosphate fertiliser. Crops and pastures grew vigorously as soil nitrogen and phosphorus levels rose.¹⁰⁷

From the deep verandahs and iron lace of Bethungra Park homestead, a steep range of blue hills is visible along the eastern horizon. In the late 1970s, a gap appeared on the skyline. In a back paddock of steep terrain, clearing contractors walked through a shady forest of drooping she-oak, black cypress pine, red box (**birgan**, *Eucalyptus polyanthemos*) and stringybark. They cut into the bark of trees and injected systemic herbicide. Later, planes dropped clover seed and superphosphate over the stony range of dying trees. When suckers rose from

¹⁰⁵ Pastoralists' Review, *The Pastoral Homes of Australia*, pp. v-vi.

¹⁰⁶ Colin M Donald, 'Innovation in Australian Agriculture', in D B Williams (ed.), *Agriculture in the Australian Economy*, Sydney University Press, Sydney, 1982, p. 59.

CUNNINGHAM PLAINS ESTATE.



SHewing EASTERN PART OF HOMESTEAD AREA AND FARM 65.

An image from a 1907 catalogue advertising the subdivision and sale of Cunningham Plains station, Harden district (Harden-Murrumburrah Museum).

tree roots and trunks, contractors returned and finished the job. A handful of short-rooted, annual pasture species replaced a diverse matrix of annual plants and deep-rooted perennial grasses, shrubs, and trees. Without a community of plants adapted to conserve moisture, the range of hills could no longer absorb and hold as much rainfall. Water shifted down and through stony hillsides. On slopes below, farmers watched bare, scalded areas spread as salty groundwater surfaced. Grass tussocks, fallen limbs, shrubs, and other material had limited run-off on the steep hillsides. Now sheets of water gathered after heavy rain and tore local creek banks away. A bushfire erased the grey and broken remains of the trees a decade after the poisoning. In winter and spring, sheep graze a fertilised pasture of exotic annual grasses and weeds. In summer, the bare hills bake.¹⁰⁸

Transcendence and war

Unusually heavy rainfall torments farmers on the Bland Creek in the Morangarell and Grogan districts, north of Stockinbingal. Water takes months to evaporate and drain away from heavy clay soils and flat paddocks. According to local farmers, compaction by machinery and deteriorating soil structures worsens the situation.¹⁰⁹ They rush to sow crops when autumn rains begin. Paddocks soon turn too boggy for heavy farm machinery. In 1999, a team of agricultural scientists embarked on a project with Bland Creek farmers. Waterlogging had destroyed crops the previous year. Yields were much lower than in adjacent areas, where soils drain more quickly. According to the Grains Research and Development Corporation, there was 'potential for large productivity improvements' along the Bland Creek.¹¹⁰ With funding from the Corporation, agricultural scien-

¹⁰⁷ Donald, 'Innovation in Australian Agriculture', pp. 59-60.

¹⁰⁸ Owen Whitaker, conversation at Oakley, Mitta Mitta district, 18 March 2003.

¹⁰⁹ 'Ways being found to beat waterlogging in the Bland region', in *Productive Solutions to Dry-land Salinity*, Grains Research and Development Corporation, Kingston, 2001, p. 22.

¹¹⁰ 'Ways being found to beat waterlogging in the Bland region', p. 22.

tists developed strategies to help farmers overcome limitations presented by the land. To soak up excess water, the team of scientists suggested landholders plant lucerne, a deep-rooted perennial pasture species. Deep ripping and the application of gypsum, scientists found, broke soils apart and improved drainage.¹¹¹

Bland Creek rises in the Dudauman and Bauloora ranges, northwest of Cootamundra, and flows past the village of Stockinbingal.¹¹² The major waterway curves through paddocks of dark, swampy earth towards Lake Cowal, south of the Lachlan River. Alexander Mackay managed Stockinbingal run in the middle of the nineteenth century. He built a sturdy dam wall across the Bland. Water banked up for two miles. 'I know that, when I was a boy', wrote Kenneth Mackay, Alexander's son, 'it was full of fresh-water cod, and that the blacks used to catch them by mudding the water.'¹¹³ According to local historian Ethel West, the area just west of the Bland at Stockinbingal 'was covered by shallow water and reeds, and this marsh was the home for wildfowl of all kinds.' She thought the suffix '-bingal' was a Wiradjuri term for 'marsh'.¹¹⁴ Wet conditions made the area 'almost impassable' when James Larmer journeyed north along the Bland from Stockinbingal in the winter of 1848. The surveyor spoke with Wiradjuri people and carefully recorded local placenames. One major lagoon beside the Bland Creek was called 'Moonbooga'.¹¹⁵ In 1879, a travelling reporter described the abundance of water along the Bland:

Usually it is nothing else but a chain of waterholes, but these are often large and deep, retaining an abundant supply of water in all seasons. As it drains a large area of plain country, it is subject in wet seasons to high and dangerous floods, to the great inconvenience of that portion of the inhabitants who have made their homes in too close proximity to its banks.¹¹⁶

¹¹¹ 'Research addresses waterlogging woes', *Rural News*, 12 October 2001.

¹¹² Bland Creek is also called Yeo Yeo Creek. According to an article in a 1935 edition of *The Pastoral Review*, the Wiradjuri name for the waterway is 'Beland' or 'Bulland'. *The Pastoral Review*, 16 September 1935, p. 942.

¹¹³ Kenneth Mackay, 'Pioneers of 1837-60', *Sydney Mail*, 3 January 1923, p. 9.

¹¹⁴ Ethel West, 'Stockinbingal: Full Belly or Marshland?', *Cootamundra Herald*, 6 July 1973.

¹¹⁵ James Larmer, 1848 field book, State Records NSW, 2/8070.1

¹¹⁶ 'A Tour through the Pastoral District of the Bland', *Cootamundra Herald*, 11 January 1879.



Road signs and flat terrain, Grogan district, November 2001.

Relations of Mary Gilmore once held Morangarell station on the Bland downstream from Stockinbingal. According to Gilmore, 'Morangorell' meant 'the nesting place of the waterfowl'. In the 1860s and 1870s, before a tide of agricultural development swept the southwest slopes, Wiradjuri gathered regularly at Morangarell to catch water birds and hold ceremonies.¹¹⁷ Sara Hawkins, born in 1862 on Curraburrama station, downstream from Morangarell, recalled those 'days of prolific seasons' in her youth, when 'the waving grass on some places on the Bland would completely hide a horseman'. The Bland was a lively place:

Emus and Kangaroos were numerous and there were plenty of wild fowl and fish. Blacks would come to the homestead with fish strung on green rushes and ask for food and tobacco in exchange. They were rather numerous then, and wore possum rugs and blankets pinned round them with wooden pins. They carried their war weapons and always had a number of dogs.¹¹⁸

When I visited Morangarell in 2001, a local farmer described to me the Bland Creek swamps of his childhood.¹¹⁹ Among 'bulrushes' lived swans, black duck (**budhinbung**, *Anus superciliosa*), grey teal (**dharrawiyang**, *Anas gracilis*), migratory snipe (*Gallinago hardwickii*), and pelicans. In the 1950s and 1960s, his father and other farmers built drains through swampy paddocks with new earthmoving equipment. They grew crops on the drained land. Birds, frogs, and rushes vanished. 'Now I'm not an environmentalist', the farmer told me, 'but I don't think they should've drained those swamps.' Today, strategies offered by agricultural scientists help Bland Creek farmers further transcend the particular nature of the watery area.

Since the emergence of agricultural science as a distinct field of inquiry late in the nineteenth century, a belief that humans can defy natural limits and boost primary production through the simplification and strident transformation of

¹¹⁷ Gilmore, *The Passionate Heart*, p. 319; and see 'Unremembered voices', Chapter Five.

¹¹⁸ 'Early Memories of Mrs. S. K. Hawkins, of Curraburrama', in *Pink Hats on Gentle Ladies*, family history notes compiled in 1974 by Vida Clift, and transcribed from the *Young Chronicle*, 4 November 1932.

¹¹⁹ Max Gregory, conversation at Morangarell, 10 November 2001.

local ecologies has defined the discipline. In 1964 Colin Donald, Professor of Agriculture at the University of Adelaide, explained there were two ways humans might build 'more rewarding' relations with their environment.¹²⁰ Man 'may seek to adapt himself more closely to the conditions he finds', wrote Donald, 'or he may attempt to modify the environment to his particular needs.' For thousands of years, farmers had substantially modified land for cropping. Now with the help of modern science, Colin Donald observed, graziers too could 'transform the environment and productivity' of regions. Agricultural scientists rejected the idea of adapting to local conditions. The dominant model of agricultural science cast the natural characteristics of rural Australia as problematic barriers to production. 'The history of Australian agriculture', agricultural economist Bruce Davidson wrote in 1985, 'is largely a story of developing new technologies to overcome problems as they arise.' According to Davidson, barriers to development included those 'caused by the physical environment'. He considered even 'the location of the continent' an obstacle to successful agriculture.¹²¹ Agricultural scientists viewed disorders induced by earlier scientific farming techniques as new challenges requiring clever solutions. In 1955 Robert Watt, Emeritus Professor of Agriculture at the University of Sydney, honoured those plant breeders who worked with 'tenacity and persistence' to deliver improved varieties and bulkier harvests 'in spite of soil erosion and obvious decrease in soil fertility in many regions'.¹²²

Few agricultural scientists, it appears, questioned the wisdom of strategies to transcend the natural realities of rural places. Some did admit to a sense of foreboding. Robert Noble joined the New South Wales Department of Agriculture in 1913.¹²³ The agricultural scientist became Director of the Department al-

¹²⁰ Donald, 'The Progress of Australian Agriculture and the Role of Pastures in Environmental Change', p. 187.

¹²¹ Bruce R Davidson, 'The History of Agriculture in Temperate Australia', *Journal of the Australian Institute of Agricultural Science*, vol. 51, no. 3, 1985, p 165.

¹²² Robert D Watt, *The Romance of the Australian Land Industries*, Angus and Robertson, Sydney, 1955, pp. 214-215.

¹²³ Robert Jackson Noble, Bright Sparcs biographical entry, www.asap.unimelb.edu.au/bsparcs/biogs/P000675b.htm, accessed February 2003.

most three decades later.¹²⁴ During his career, Noble witnessed profound changes in Australian farming systems. Robert Noble gave the annual Farrer Memorial Oration at Hawkesbury Agricultural College in western Sydney when he retired in 1959.¹²⁵ Noble reflected on the great faith people held in the ability of interventionist science to deliver an abundance of primary produce. 'There are some who regard it as heresy for anyone to suggest that there are any limitations to Australia's production potential', he told the audience. 'Mistakes were made' as settlers developed agricultural regions,

and it is easy for us for example to assess now the losses—in some cases the irreparable losses—which have occurred through erosion of our soil, the most precious of our natural resources. Let us hope that we too, are not, quite unknowingly, making mistakes for which future generations may have to suffer.

The New South Wales Department of Agriculture employed some of Australia's first agricultural scientists. Formed in 1890, the Department hoped 'to help those now on the soil, to educate their sons and daughters who will succeed them, and to offer every facility and encouragement to wider and more intelligent occupation of the still unsettled tracts of this great colony'.¹²⁶ Two years later, the Department opened an experiment farm near Wagga, north of the Murrumbidgee River beside Houlaghans Creek. Workers ringbarked, grubbed, and burned a local forest of red gum, white box, and black cypress pine. Here, young farmers studied alongside experimental scientists. The students learned agricultural theory and practice. Scientists trialed varieties of wheat, grapes, and other crops thought suitable for inland districts.¹²⁷

To further promote agricultural science and learning, the New South Wales Government opened other experimental and educational institutions on the

¹²⁴ Australian Science and Technology Heritage Centre, 'Noble, Robert Jackson', Bright Sparcs biographical entry, www.asap.unimelb.edu.au/bsparcs/biogs/P000675b.htm, accessed February 2003.

¹²⁵ Robert J Noble, *Agriculture and the United Nations*, 1959 Farrer Memorial Oration, V C N Blight, Government Printer, Sydney, 1960, p. 8.

¹²⁶ NSW Agriculture, 'Brief History', www.agric.nsw.gov.au/reader/35, accessed February 2003.

¹²⁷ June Sutherland, *From Farm Boys to PhDs: Agricultural Education at Wagga Wagga*, Charles Sturt University, Wagga Wagga, 1996, pp. 2-3.

southwest slopes and plains. After widespread lobbying by local farmers, the Temora Demonstration Farm opened in 1912 'to examine the agricultural problems of the district and to demonstrate to farmers the best ways to manage crops which were suited to the district'.¹²⁸ At Temora, agricultural scientists tested varieties of wheat and oats and explored new methods of crop rotation and pasture improvement. In 1934, investigations began into the establishment of subterranean clover pastures nourished with superphosphate fertiliser. Research scientists in the western districts of Victoria had recently shown how the imported annual species of clover responded vigorously to phosphorus.¹²⁹ In the 1930s and 1940s, 'sub and super' transformed farming systems across the western slopes. Alex Baldry, a retired grazier and farmer at Wallendbeen, told me how excited his father became after following Department of Agriculture advice to sow sub-clover and spread superphosphate—the clover grew so tall.¹³⁰ Fertilised clover could support many more sheep than the brome, barley, and kangaroo grasses it replaced. Phosphate fertiliser fuelled clover growth as autumn and winter rains fell. A leafy annual, sub-clover set seed during spring then died away as summer approached. Over summer, sheep grazed dry clover herbage and nutritious deposits of clover seed.

Subterranean clover is a leguminous plant. Bacteria form nodules on roots and fix nitrogen captured from air into soil.¹³¹ After World War Two, rising soil fertility rates and developments in agricultural machinery and chemicals encouraged farmers to commit more paddocks to cereal crops. The area sown to wheat on the western slopes of New South Wales rose almost fourfold between 1945 and 1980.¹³² Aesthetically, farmland and grazing paddocks changed profoundly. 'The country looked much wilder years back, before the war', Alex Baldry said.¹³³ He remembers some native grasses growing tall, others short. Walking through paddocks as a child, Alex often found bird nests hidden in swathes of

¹²⁸ NSW Agriculture, 'Temora Agricultural Research and Advisory Station', www.agric.nsw.gov.au/reader/10855, accessed April 2002.

¹²⁹ Barr and Cary, *Greening a Brown Land*, p. 34.

¹³⁰ Alex Baldry, conversation at Wallendoon, Wallendbeen district, 29 October 2001.

¹³¹ L A Pockley, *A Handbook for Farm Managers*, Bay Books, Kensington, c. 1987, p. 107.

¹³² Greg Whitwell, *The Australian Wheat Industry: 1939-1989*, Macmillan Australia, South Melbourne, 1991, p. 67.

grass tussocks. Weeds were a problem. 'Chinese thistle', a plant with spiked yellow blossoms, was particularly hard to control. In later decades, Chinese thistle and other problem plant species vanished as farmers took advantage of new herbicides. Alex led me down an interior hallway to see an old photograph in a timber frame, hanging from the picture rail. In the image, his homestead and garden sit on a hill ruffled with native grasses.

In the twentieth century, a complex dynamic of economics and culture drove settlers to transform rural places across the western slopes. Perceptions of indigenous plants and local ecologies as deficient and problematic enabled change. Australian rural terrain, agricultural scientists stressed, was characterised by 'recurrent droughts', 'Sparse and erratic rainfall', soils of 'extreme poverty', 'useless scrub and poor forest', 'inferior natural swards' of perennial grasses 'unadapted to grazing by sheep and cattle'.¹³⁴ Scientists saw farmland as a malleable resource available for national and industrial purposes. 'No one argued that we should accept this poor, old continent for what it was', writes retired agricultural scientist David Smith. 'It was ours to improve, to manage. We were to take what was and use our knowledge to make gain for our nation and humanity'.¹³⁵

Land was often seen as indifferent, even hostile to settler interests, undermining motivation and potential for relationships of intimacy and care. 'AS TOUGH AS THE COUNTRY IT HAS TO FENCE', declared an advertisement for A.R.C. Weldmesh rural products published in 1985.¹³⁶ Representations of Australian land as 'indifferent or malign' served colonial purposes, suggests literary

¹³³ Alex Baldry, 29 October 2001.

¹³⁴ Eric J Underwood, *The Role of Science in the Development of the Animal Industries of Australia*, A S Nivison Memorial Address, delivered at the University of New England, Armidale, on 19 October 1967, published version held by the National Library of Australia; and C M Donald, 'The Progress of Australian Agriculture and the Role of Pastures in Environmental Change', Farrer Memorial Oration, delivered in the Great Hall, University of Sydney, 24 September 1964, and published in the *Australian Journal of Science*, vol. 27, no. 7, January 1965, pp. 187-198.

¹³⁵ David F Smith, *Natural Gain in the Grazing Lands of Southern Australia*, UNSW Press, Sydney, 2000, pp. 201-205.

¹³⁶ Humes A.R.C., 'AS TOUGH AS THE COUNTRY IT HAS TO FENCE', advertisement in *Australian Agriculture*, National Farmers' Federation, Camberwell, 1985, p. 175.

scholar David Tacey.¹³⁷ Casting land as an opponent justified and promoted efforts to harness rural places for high-output, export-oriented production. In 1967, agricultural scientist Eric Underwood described the 'environmental improvement' science delivered to the harsh terrain of rural Australia, 'a record of which any country could justly be proud.'¹³⁸ Underwood drew upon nationalist myths of heroic colonists doing battle with the land. He denied the experience and ecological understandings of Aborigines, people who saw the same terrain as familiar and nourishing:

The pioneer settlers of this country found themselves in an environment which was always strange and often harsh. There was no body of local practical experience upon which to draw and no research and extension services upon which to lean. Such challenging circumstances called for courage, initiative and endurance of a high order, as well as a capacity for hard physical work. These qualities were abundantly present in the minds and bodies of the early farmers and graziers and their wives. Such qualities are still required and still exist in the men and women on the land in many parts of this continent.¹³⁹

Agricultural science offered settlers power over natural forces seen as troublesome. Promises of mastery defined the philosophical framework of Enlightenment science that emerged in western Europe in the seventeenth and eighteenth centuries. René Descartes, a leading progenitor of Enlightenment rationalism, drew a sharp distinction between physical matter and the human imagination.¹⁴⁰ People could apply objective scientific knowledge, Descartes argued, understandings abstracted from distorting particularities of time and place, to achieve 'mastery and possession of nature'.¹⁴¹ The Enlightenment basis of agricultural science is reflected in the cultures of Australian agricultural schools and colleges. Yanco Agricultural High School opened northwest of Narrandera

¹³⁷ David Tacey, 'Dissolving into Landscape: Psyche, Earth & Sacrifice', *Island*, no. 56, spring 1993, p. 48.

¹³⁸ Underwood, 'The Role of Science in the Development of the Animal Industries of Australia', p. 10 and p. 12.

¹³⁹ Underwood, 'The Role of Science in the Development of the Animal Industries of Australia', p. 3.

¹⁴⁰ Robert Pogue Harrison, *Forests: The Shadow of Civilisation*, University of Chicago Press, Chicago, 1992, p. 107.

¹⁴¹ Rene Descartes quoted in Harrison, *Forests*, p. 108.

in 1922. The Department of Education appointed Ernest Breakwell, formerly an economic botanist in the Department of Agriculture, as Principal.¹⁴² Breakwell sought to attract boys from urban and rural backgrounds. A feature on Yanco Agricultural High School appeared in a Sydney newspaper one year after opening. No young man, 'whether he be a town-bred boy or a farmer's son, should be denied the opportunity of obtaining all possible information and scientific training in the greatest of all industries', readers were told. Keen competition for primary products made thorough training in agriculture a necessity for boys with an interest in farming. 'To no one is there more significance in the old school aphorism "knowledge is power" than to the young man who is to be a farmer', the newspaper declared.¹⁴³

Enlightenment scientists believed mechanistic laws governed natural systems. Nature was knowable and controllable, not complex and dynamic. Agricultural science became 'a world force' in the first half of the twentieth century, observed Otto Frankel, Chief of the Division of Plant Industry at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) from 1951 to 1962, helping 'to conquer the earth for man's use.'¹⁴⁴ Reflecting on ecological alterations imposed across rural southern Australia since World War Two, agricultural scientist David Smith celebrated a history of 'conquest' achieved by 'visionaries' and 'champions'.¹⁴⁵ Smith praised fellow agricultural scientists, men like Eric Underwood. In 1928, Underwood left the University of Western Australia with a first class honours degree in agricultural science and travelled to England. At the University of Cambridge, the young scientist studied factors influencing milk availability in ewes and the nutritional effects of nitrogen fertilisers.¹⁴⁶ Back in Australia, Underwood built a reputation as an expert on the nutrition of grazing animals. In 1976, the Royal Agricultural Society of England

¹⁴² 'Yanco Agricultural High School: Some Early History', www.yahs.nsw.edu.au/history.htm, accessed April 2003.

¹⁴³ 'Development of Agricultural Education in N.S.W.', *Sydney Mail*, 17 January 1923.

¹⁴⁴ Australian Science and Technology Heritage Centre, 'Frankel, Otto Herzberg (1900-1998)', Bright Sparcs biographical entry, www.asap.unimelb.edu.au/bsparcs/biogs/P000422b.htm, accessed October 2003; and Otto Herzberg Frankel, 'The Social Responsibility of Agricultural Science', Farrer Memorial Oration, 1962, *Australian Journal of Science*, vol. 25, no. 7, January 1963, p. 301.

¹⁴⁵ Smith, *Natural Gain in the Grazing Lands of Southern Australia*, p. 163 and p. 174.

elected him an honorary member. The National Library of Australia holds Underwood's papers. One photograph in the collection shows a distinguished figure. He glances at notes through dark-rimmed glasses, grasps the lectern, and speaks into a microphone. Perhaps the photograph was taken at the University of New England in 1967, when Eric Underwood argued for the maintenance of close ties between farmers and agricultural scientists.

Producer and scientist will need to maintain the confidence in each other that has been such a significant feature of the past and the community as a whole must be kept informed of the rich dividends which have come and which can come from investment in science and its application to our primary industries. It is this investment which has contributed so much to the great tradition of the Australian people – the mastery of the land.¹⁴⁷

Agricultural scientists and technologists developed new primary production systems in the final decades of the twentieth century. Chemical farming methods ended the practice of repeated cultivation to control weeds and prepare paddocks for sowing, a practice exposing farmland to significant erosion.¹⁴⁸ Stubble retention and minimum tillage, made possible by broad-spectrum herbicides and more powerful tractors, returned organic matter and structure to soils. On the southwest slopes, the frequency of severe erosion events declined. Successful conservation and restoration of farming soils did not, however, reflect changes in the dominant imaginative framework of modern agriculture. Economic factors ensured a forceful quest for mastery over natural systems still characterised Australian farming.

In the 1970s and 1980s, Australian governments withdrew a range of economic devices protecting rural industries.¹⁴⁹ Little scope existed for landholders to explore alternative ways of engaging with farmland. After the end of World War Two, declining terms of trade caused farm input costs to rise persistently faster

¹⁴⁶ Eric J Underwood, papers, National Library of Australia, manuscript collection, MS 7082.

¹⁴⁷ Underwood, 'The Role of Science in the Development of the Animal Industries of Australia', p. 14.

¹⁴⁸ See 'Death and disorder', Chapter Six.

¹⁴⁹ See 'Demanding production', Chapter Two.

than prices received for produce, a phenomenon termed the 'cost-price squeeze'. Farmers with enough skill, education, and financial capital made adjustments. Many bought or leased properties from neighbours unable or unwilling to hang on. Each year since the middle of the 1950s, about two thousand Australian farms have disappeared into other holdings.¹⁵⁰ In real terms, total farm debt in Australia rose from almost ten billion dollars in the late 1970s to more than twenty billion two decades years later.¹⁵¹ It is no coincidence that ecological problems like soil acidification and dryland salinisation emerged as major threats to farmland productivity over the same period. Across expanding acreages, land managers intensified their farming practices. Seeking profits, they applied new mechanical and chemical technologies to boost yields.¹⁵² Natural systems began to falter.

An 1878 edition of *The Garden and the Field*, a South Australian agricultural journal, describes a process of 'warfare' waged against rural places by agricultural societies, local organisations promoting scientific farming methods.¹⁵³ 'We look upon an Agricultural Society in the light of an army of soldiers engaged in an effort to conquer and "civilise" the land—that is, to subdue it and render it subservient to the uses of man', the journal declared. The language of war became commonplace in Australian agriculture as economic pressures and industrial production systems intensified in the second half of the twentieth century. 'Winning the war against weeds', a farm herbicide advertisement announced in 1987.¹⁵⁴ Crop monocultures are particularly vulnerable to weed competition, insects, and disease. Powerful means of protection are necessary, furthering the use of war rhetoric. 'Don't be in doubt as to how to wage war against profit devouring weeds and insects', farm chemical company Wilcox Mofflin told farmers in 1955. 'Simply describe the problem in a letter to Wilcox Mofflin and let

¹⁵⁰ Geoffrey Lawrence and Ian Grey, 'The Myths of Modern Agriculture: Australian Rural Production in the 21st Century', in Pritchard and McManus, *Land of Discontent*, p. 38.

¹⁵¹ Vaughan Higgins and Stewart Lockie, 'Getting big and getting out: Government policy, self-reliance and farm adjustment', in Lockie and Bourke, *Rurality Bites*, pp. 178-90.

¹⁵² Bruce R Davidson, 'The History of Agriculture in Temperate Australia', *Journal of the Australian Institute of Agricultural Science*, vol. 51, no. 3, 1985, p. 165.

¹⁵³ 'Agricultural Societies and Farmers' Clubs', *The Garden and the Field: A Journal of General Industries*, vol. 4, no. 39, 1 August 1878.

our Weed Experts supply the effective answer.'¹⁵⁵ Brand names of farm chemicals used today reflect the forceful agendas underlying modern agricultural systems: 'Advance', 'Ally', 'Arsenal', 'Ballistic', 'Barrel', 'Baton', 'Broadside', 'Broadstrike', 'Clearfield Advantage', 'Detonate', 'Flame', 'Fusilade', 'OnDuty', 'Rifle', 'Scud', 'Showdown', 'Sniper', 'Stomp', 'Verdict', 'Wipeout'.¹⁵⁶

As competition strengthens in the global marketplace, manufacturers offer rural landholders a stronger grip over natural systems. Advertisements for farm chemicals and machinery promise farmers 'more power' and 'more control'.¹⁵⁷ Today, tractors with the pulling power of five hundred horses are on the market.¹⁵⁸ 'Unleash extreme power and productivity' invites the manufacturer of 'Powerful Knights', a new line of tractors, in a recent newspaper advertisement.¹⁵⁹ 'Like legendary knights of old', the advertisement reads beside an image of giant tractors and a bare paddock, 'these all-new powerfully built tractors command respect.' A turbocharged engine with '450 horsepower waiting to be unleashed' propels the largest machine available. The new tractors are weapons of war, and natural terrain is cast as hostile: 'With record-breaking power, torque and strength these formidable machines can do battle in the harshest conditions'.¹⁶⁰

Battling the Land: 200 Years of Rural Australia, published in 1999, seeks the 'grand themes' of Australian rural history and culture.¹⁶¹ Rob Linn, author of the cele-

¹⁵⁴ Monsanto Co., 'Monsanto: Winning the war against weeds', advertisement in *Australian Agriculture*, National Farmers' Federation, Camberwell, 1987, p. 12.

¹⁵⁵ Wilcox Mofflin Limited, 'The Quickest, Surest Way To Solve Weed Problems', *Agricultural Gazette of New South Wales*, May 1955, opposite p. 268.

¹⁵⁶ C L Mullen, J J Dellow and C J Tonkin, *Weed control in winter crops 2001*, NSW Agriculture, Canberra, 2001; American Cyanamid Company, *Clearfield Production System*, pamphlet, no date; and Aventis CropScience Pty Ltd, *Giant: Product guide*, pamphlet, no date.

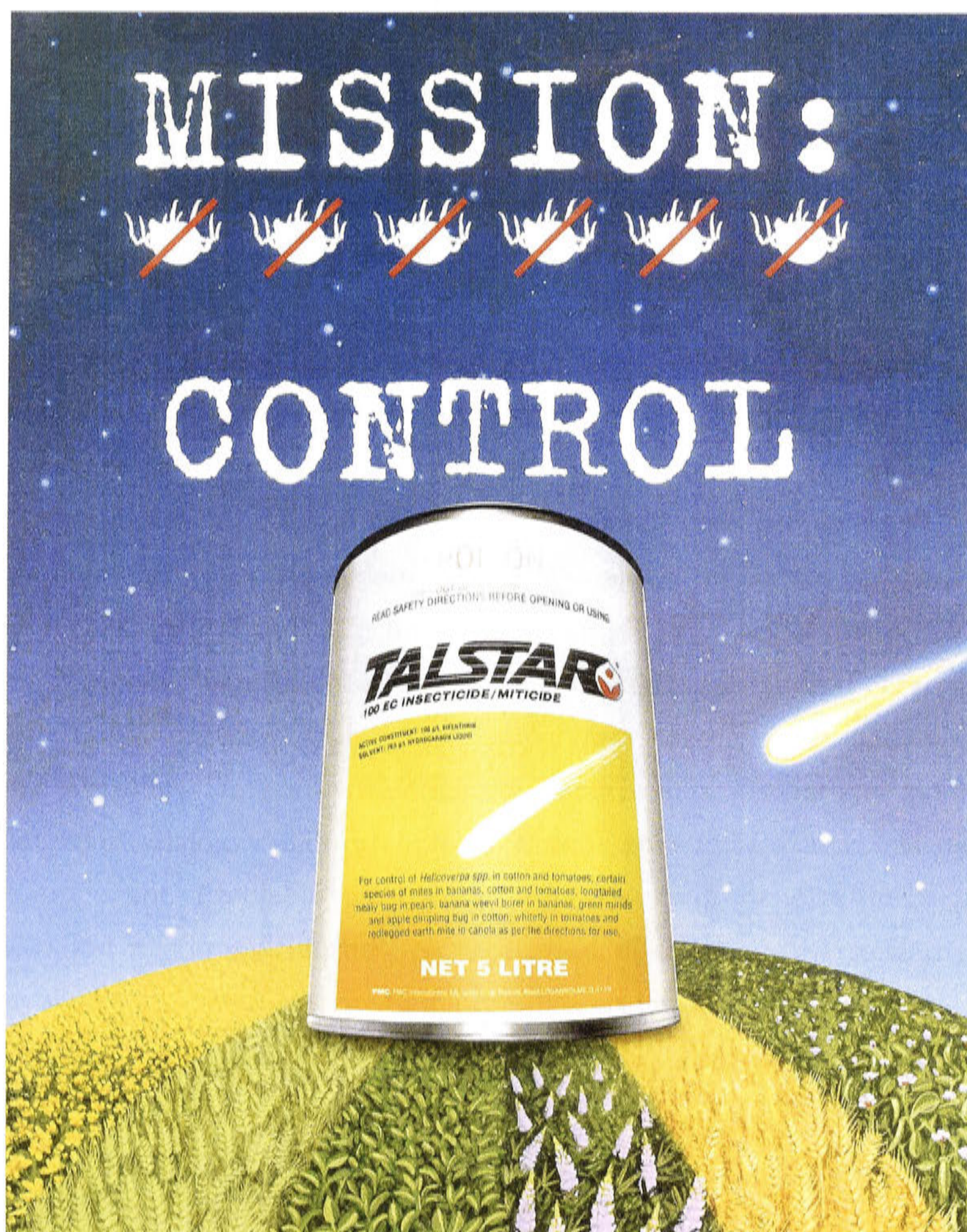
¹⁵⁷ 'The Next Generation. More Power. More Control. Still as Soft', advertisement for LOGRAN B-POWER, a herbicide marketed by Syngenta Crop Protection Pty Ltd for use in wheat crops, *The Land*, 28 March 2002; and 'John Deere 6010 Series Model Clearance', *Town Country Magazine*, 19 November 2001.

¹⁵⁸ 'Unmatched Power and Versatility Headline All-New Challenger ® MT800 Series Tractor', www.agpr.com/ccisite/001.html, accessed January 2003.

¹⁵⁹ 'TJ 4WD Tractors', www.newholland.com/au/TJ_tractor.htm?Reg=AU&RL=ENAU, accessed January 2003.

¹⁶⁰ 'Powerful Knights', *Southern Weekly Magazine*, 13 May 2002.

¹⁶¹ Rob Linn, *Battling the Land: 200 Years of Rural Australia*, Allen and Unwin, St Leonards, 1999.



Mission: To rid paddocks of redlegged earth mite at bare earth stage.

Deadline: Up to 60 days residual control.

Location: Canola, barley, seedling lucerne, lupins, wheat and field peas.

Instructions: Take control with Talstar insecticide/miticide.



'Talstar' poster, distributed by the Cootamundra Farm Centre, 2001.

bratory book, describes 'a prolonged battle between people and the land'.¹⁶² *Battling the Land* reveals and helps reinforce heroic narratives of rural colonisation. Struggle between settlers and nature, Linn observes, lies 'at the heart of any true understanding of the story of rural Australia'. In the face of ecological disorders threatening the productivity of farming today, Rob Linn sees modern science and the Landcare movement offering 'the means of overcoming adversity'.¹⁶³ Linn presents ecological sickness as another barrier to production, another challenge facing scientists and farmers. Even within Landcare, a movement often represented as symbolic of deep attitudinal change, the established project of mastery tends to prevail. In the context of modern agriculture, notions of settlers 'battling' rural places underlie the use of terms like 'sustainability' and 'natural resource management'. Farmland, bound to the global marketplace, is considered primarily a 'natural resource' available for commercial activity. The rhetoric of 'natural resource management' casts people outside nature, above and in control of land and other species. Synonyms of 'manage' listed in *The Oxford Thesaurus* include 'administer', 'boss', 'control', 'direct', 'discipline', 'govern', 'handle', 'head', 'lead', 'manipulate', 'mastermind', 'oversee', 'preside over', 'regulate', 'rule', 'run', 'supervise', 'take care of', and 'watch over'.¹⁶⁴ Attitudes dominant within natural resource management and modern farming block dialogue with rural places. Nature tends to be seen as a troublesome opponent. Profitable production, it is assumed, requires force and monological relations. Unfortunately, ecological disordering of farmland has not evoked widespread critique of the complex economic and cultural dynamics driving quests for mastery over rural places and the natural forces of the land.



The small town of Henty came into existence beside Buckaringah Creek in the late 1870s, as the Great Southern Railway extended south from Wagga. To gen-

¹⁶² Linn, *Battling the Land*, p. 172.

¹⁶³ Linn, *Battling the Land*, pp. 170-71.

erate steam, train engines needed regular replenishment with water. Workers and horse teams excavated a major reservoir on Buckaringah Creek. Pipes drew water into an overhead tank. A small town grew as selectors carved farms from pastoral runs.¹⁶⁵ Today, the streetscape of Henty reflects the commercial dynamics behind the transformation of local hillsides and creek flats into farmland. Concrete silos form a backdrop to solid bank buildings. In the main street, a sign directs visitors to a town park to see the Headlie Taylor Header Memorial. An old mechanical harvester, carefully restored to working order by members of the United Farmers and Woolgrowers Association, is displayed inside a small shed with a flat roof. Bands of windows enable viewing from outside. Early in the twentieth century, Henty district farmer Headlie Taylor developed a mechanical device to harvest and process wheat crops flattened by heavy storms. His invention attracted great interest. In 1916, Taylor joined the Sunshine Harvester Works in Victoria, a prosperous manufacturing firm owned by HV McKay, the famous inventor of the Sunshine stripper harvester.¹⁶⁶ Inside the Sunshine factory, Taylor further developed his popular machine. 'The Taylor Header is regarded as the greatest single contributing factor to the development of the world cereal industry', a sign reads above the restored Headlie Taylor Header.

The association of the Henty district with farm machinery extends beyond the Headlie Taylor Header. Henty Machinery Field Days were first held in 1963 at the local showground. Farmers listened carefully as machinery companies touted new products, inventions able to boost the efficiency and profitability of farming systems and counter the effects of declining terms of trade, a worrying and persistent trend. In 1977, organisers of the annual event secured title over a travelling stock reserve east of Henty beside Buckaringah Creek. The reserve 'was totally filled with timber', a local historian notes, 'and as such, developed

¹⁶⁴ Laurence Urdang, *The Oxford Thesaurus*, Clarendon Press, Oxford, 1991.

¹⁶⁵ Henty Centenary Committee, *From Early Beginnings: Henty NSW, Home of the Header*, Henty, 1986, pp. 10-23.

¹⁶⁶ Headlie S Taylor, 'The Genesis of the Sunshine Header', in Henty Centenary Committee, *From Early Beginnings*, pp. 242-47.



Headlie Taylor Header demonstration, Henty, 1915 (State Library of New South Wales).

from that time, has seen the extraction burning and preparation of the site to where it is now, one of the most attractive Field Day venues in Australia.¹⁶⁷

As the twentieth century closed, intensifying competition in the global marketplace and a tightening cost-price squeeze ensured the event grew in popularity. 'Independent research shows that farmers are hungry for technical information about new technology that can improve their productivity and reduce costs', a journalist observed in 2001 as thousands of people gathered at the Field Days site.¹⁶⁸ Wheat crops were dark green and the canola was starting to flower when I drove to Henty Field Days two years later. Across three September days more than sixty thousand people attended. Exhibitors displayed two hundred and fifty million dollars worth of machinery.¹⁶⁹ Reflecting established traditions of agricultural science and technology, organisers of the event promised farmers transcendence over the natural barriers of Australian farmland: 'Henty is a massive outdoor supermarket for leading edge farm machinery, products and services from North America and Europe and showcases Australia's unique engineered and technical solutions to the challenges of farming on one of the world's driest continents.'¹⁷⁰

A frog called from a waterhole in Buckaringah Creek as I entered the Field Days site. Red gums shaded the curving path of the waterway. Scattered yellow box and grey box (**murrung**, *Eucalyptus microcarpa*) trees rose above pavilions, machines, and the mass of visitors. *The Land* newspaper displayed a photographic exhibition of old farming scenes. One image showed horse teams pulling reaping and binding machines through a ripe wheat crop. Workers gathered sheaves and placed them upright, building a series of stooks. In another photograph, six men loaded hessian bags filled with grain onto the back of a truck. In spring sunshine nearby the old photographs, farmers considered new machines with names like Maxxima, Challenge, Speed Drill, Agmaster, Mag-

¹⁶⁷ Henty Centenary Committee, *From Early Beginnings*, p. 276.

¹⁶⁸ 'Farm machinery display grows', *Rural News*, 7 September 2001.

¹⁶⁹ 'Henty Machinery Field Days Preview', *The Land*, 11 September 2003.

¹⁷⁰ 'Welcome to Henty Machinery Field Days Online', www.hmfd.com.au, accessed November 2003.

num, Dominator—names resonant of intense economic demands for efficient, high-output production, of pressures sustaining a desperate quest for mastery over natural systems. Australian farmers carried a combined debt level of more than twenty-six billion dollars in 2000. On average, each farmer held debts totalling one quarter of a million. In the same year, the average farm business spent more than one hundred and sixty thousand dollars on agricultural inputs and other expenses.¹⁷¹ At Henty Machinery Field Days in 2003, inside marquees and sheds, agribusiness bankers marketed 'innovative and customised financial solutions' to farmers.¹⁷² Ian Macdonald, New South Wales Minister for Agriculture and Fisheries, opened the Field Days and spoke of the need for further applied research and new technologies to keep farm productivity rising.

Cookarbine Hill, a monumental granite rise, formed a backdrop to banners flapping in the spring breeze and lines of grain augers angled skyward. Buckaringah Creek gathers water from the steep slopes of Cookarbine Hill and Buckaringah Sugarloaf. The waterway meanders westward through paddocks, past the Field Days site and the town of Henty. Beyond the settlement, Buckaringah Creek flows into Dudal Swamp, a two thousand-hectare depression studded with old river red gums (**biyal, yarra**, *Eucalyptus camaldulensis*). Generations ago, locals noticed the disappearance of hillside springs after ring-barking teams denuded Cookarbine Hill.¹⁷³ Instead of soaking down through porous granite and seeping from slopes, rainfall drained swiftly across hillsides bared of trees, shrubs, and fallen limbs—a textured surface that formerly slowed and captured water. Early in the twentieth century, when Dudal Swamp flooded during particularly wet seasons, Henty residents gathered for boating events. As decades passed, sandy material eroding from hillsides and

¹⁷¹ Australian Bureau of Statistics, 'Agriculture: Financial statistics of farm businesses', *Year Book Australia* 2003, www.abs.gov.au/Ausstats/abs%40.nsf/94713ad445ff1425ca25682000192af2/28150da51b425efaca256cae0015bac9!OpenDocument, accessed November 2003.

¹⁷² Agribusiness financing companies at Henty Machinery Field Days in 2003 included Rabobank Australia Pty Ltd, St George Bank Pty Ltd, Suncorp Metway, and Westpac; quoted text from www.rabobank.com.au, accessed November 2003.

¹⁷³ Henty Centenary Committee, *From Early Beginnings*, p. 59.



Billboard and wheat crop, Wagga district, November 2001.

paddocks spread across the swamp. Red gum saplings grew, preventing even the smallest boats from sailing.¹⁷⁴

Late in the afternoon, I drove a short distance on a sandy track south of Henty, alongside Dudal Swamp, and started walking. Cattle occupied green swamp-land paddocks. Black and grey calves ran about, tails lifted in play. The air smelled moist. I passed river gums sinuous and tall, solid forms holding centuries. A steady hum of trucks and cars carried from the highway. A flock of white-winged choughs (**gunydyung**, *Corcorax melanorhamphos*) made raucous sounds in grey box trees nearby. I noticed a pale stone on the track, and stopped to pick it up. With a ground edge, the small tool looked like a miniature greenstone axe. I held the worked stone in the palm of my hand, so unlike the bulky, complicated instruments on display at the Field Days.

As I gazed at the stone beside ancient red gums, the artefact seemed to say something about the desires of its creators to work in partnership with dynamic natural forces. While the industrial devices of settlers may be mechanically elaborate, they tend to impose crude changes. Assumptions that nature can be known and controlled continue to drive the development and application of many agricultural technologies. Unresponsive to the shifting and various needs of local ecologies, modern machinery requires and imposes a simplification of intricate natural patterns. Wiradjuri people approached the land differently. Minor responses based on intimate understandings of complex and dynamic terrains fostered an abundant diversity of swamp and grassy woodland species. Biological diversity made land resilient and maintained natural productivity and stability. Powerful machines developed and applied by settlers emerged from different cultural contexts and frameworks of belief. Narratives of technological and social progress, perceptions of a fundamental divide between humans and nature, commitments to global networks of trade and power, and mechanistic understandings of natural processes led settlers to transform rural places in strident ways. Dryland salinisation, soil acidification, premature deaths of paddock trees, declining bird populations, waterway pollution, and

¹⁷⁴ Henty Centenary Committee, *From Early Beginnings*, p. 172.

other ecological problems present today in Australian agricultural regions are unfortunate, unseen consequences of major interventions in complex and dynamic systems of nature.



River red gums, Dudal Swamp, Henty district, September 2003.

Elsewhere

Pathways

Mary Gilmore described a conversation she overheard as a child, standing by her father. Donald Cameron and a senior Wiradjuri man talked about the different types of ships known to land in northern Australia.¹ When boats with brown and single 'mat-sails' approached the shore, Aboriginal clans welcomed the sailors from Macassar, an island on the other side of the Arafura Sea. But when a ship appeared with tall masts and many white sails, Cameron and his daughter learned from the Wiradjuri elder, women and children went inland. Europeans, unlike Macassans, brought disease and violent death.² Beside the Murrumbidgee River, on the other side of the continent from the warm seas of northern Australia, Wiradjuri knew in detail the differences between European and Macassan ships. Across Australia, people carried stories and ideas with ochres and greenstone axes along pathways of ceremony, communication, and trade.³

¹ Gilmore, *Old Days: Old Ways*, pp. 130-33.

² Recent scholarship suggests Macassan sailors brought smallpox to Australia, see 'Securing the land', Chapter One.

³ John Mulvaney and Johan Kamminga, *Prehistory of Australia*, Allen and Unwin, St Leonards, 1999, pp. 93-101; Anthropologist WEH Stanner described Aboriginal trade routes crossing the continent as 'highroads of cultural influence'. WEH Stanner, 'Ceremonial Economics of the Mulluk Mulluk and Madngella Tribes of the Daly River, North Australia, A Preliminary Paper', *Oceania*, vol. 4, no. 1, 1933, p. 172.

Colonisation bound the southwest slopes of New South Wales to faraway cities and export destinations, to global networks of trade and power. Routes of commerce and migration enabled dramatic social and ecological change. Squatters made tracks northeast across the southern tablelands to deliver fat cattle and wool bales to Sydney markets. Unfamiliarity with land made settlers vulnerable as they traversed the western slopes in the early decades of settlement. John White came to the Young district in 1828 to help his brother James found Burrangong squatting run. Almost a century later, his daughter Sarah Musgrave published *The Wayback*, an account of life at Burrangong when colonisation of the southwest slopes began.⁴ Six years after he arrived, Musgrave explained, her father became lost in dry, scrubby terrain. A boy rounding up cattle encountered John White's body nine days later, limp and torn by dingoes (**dinggu**, **yugay**, *Canis lupus dingo*). Sarah Musgrave told stories of other men vanishing into bushland. A shepherd lost his bearings east of Burrangong in the same area where John White perished. To stay alive, the shepherd cut pieces from the tails of his two sheep dogs and drank their blood. He stumbled into Burrangong homestead six days later. According to Sarah Musgrave the faithful dogs, thirsty and maimed, stuck by the man throughout.⁵ After the death of his brother John, Burrangong squatter James White and Wiradjuri elder Cobborn Jackie marked the eastward track. They cut blazes into tree trunks to signpost the route through the bush. Cobborn Jackie was a skilled 'bush surveyor', wrote Musgrave, 'wonderful in the art of straight lines.' He helped James White survey many tracks. The pathways determined by White and Cobborn Jackie joined routes defined by other Wiradjuri for neighbouring squatters. Tracks traversing and linking squatting runs eventually became the main roads of the region.⁶

In the early decades of colonisation on the southwest slopes, squatters relied on bullock wagons to transfer goods to and from urban markets and seaports. As Melbourne grew in the 1830s, some Murrumbidgee River squatters made the

⁴ See 'Securing the land', Chapter One.

⁵ Musgrave, *The Wayback*, p. 8.

⁶ Musgrave, *The Wayback*, p. 9.

journey to the southern port settlement instead of Sydney.⁷ Drovers delivered cattle and sheep fattened on kangaroo and wallaby grasses to city saleyards and slaughterhouses. Wagons carted away heavy bales of wool and returned to stations laden with supplies. Goods ordered in 1850 from Sydney for Wallendbeen station included woolpacks, sheep shears, tobacco, children's boots, rice, cooking utensils, eighteen dresses of various print, vegetable seeds, six shepherd's coats, tools, blankets, an account book, saddles, a gun and lead shot, and one table cloth.⁸ Rough roads meant long journeys. A return trip by bullock wagon to Melbourne or Sydney could take months.⁹ James Gormly remembered a treacherous route alongside the Murrumbidgee between Wagga and Narrandera. In wet seasons, travellers encountered billabongs full of water. Seven people drowned along the road one winter in the 1850s.¹⁰

Steamboats began plying the Murrumbidgee River to service towns and stations in the 1860s. Boats entered the waterway at its confluence with the Murray River, near Balranald, and journeyed upstream to Wagga. Steamers proved faster and cheaper than bullock wagons and more comfortable than coach travel.¹¹ As Narrandera historian Bill Gammage explains, 'nothing else could permit travellers a bath or a drink, or let them laze back watching the scenery without being jolted savagely about, and nothing else could link the bush so quickly and cheaply with the world.'¹² Boats and barges carried produce loaded from Murrumbidgee wharves thousands of kilometres west to Goolwa, at the mouth of the Murray River in South Australia. A horse-drawn railway linked Goolwa to Port Elliot, where workers stacked wool bales onto ships bound for Britain. In 1864, the Melbourne railway reached Echuca on the Murray River southwest of Wagga. Bullock teams and Murrumbidgee steamers delivered Riverina produce to Echuca for swift transport to Melbourne markets and export terminals. *Victoria*, a steamboat owned by the Wagga Wagga Steam Navi-

⁷ Morris, *Wagga Wagga*, p. 50.

⁸ Letter from Wallendbeen, 31 December 1850, Baldry family papers.

⁹ Gordon Leslie Buxton, *The Riverina 1861-1891: An Australian Regional Study*, Melbourne University Press, Carlton, 1967, p. 21.

¹⁰ James Gormly, in Gammage, *Narrandera Shire*, p. 214.

¹¹ Morris, *Wagga Wagga*, p. 50.

¹² Gammage, *Narrandera Shire*, p. 53.

gation Company, regularly hauled five hundred bales of wool from Wagga to Echuca.¹³ Steamers returned to Murrumbidgee River wharves with fencing wire, galvanised iron, glass windows, crockery, and other fragile and unwieldy goods.

In 1875, a Wagga newspaper published a series of letters discussing local trade and transport matters. The male writer, an anonymous traveller, observed most business flowing south to Melbourne and back again. Storekeepers and graziers along the Murrumbidgee, he noted, received merchandise carted from the Victorian railhead at Echuca on large steamboats and barges belonging to wealthy merchants and on smaller vessels owned by their captains. Steamers returned to Echuca towing barges laden with wool, oats, hay, and other primary produce destined for Melbourne. Sydney markets prevailed north of Gundagai. Coaches and wagons climbed eastward onto the southern tablelands to meet the Sydney railway at Goulburn.¹⁴ The visiting correspondent journeyed down the Murrumbidgee from Wagga on the locally owned steamboat *Victoria*. He saw workers dragging fallen trees and branches from the river channel. 'It has been computed', the traveller wrote, 'that it will take ten years to remove all the snags between Hay and Narrandera.'¹⁵ Snags hindered the safe passage of steamboats and wool barges along the Murrumbidgee River. So too did another barrier to pastoral commerce erased by colonists, the elaborate networks of stone fish traps tended by Wiradjuri.¹⁶ Passing Berembend station, upstream from Narrandera, the anonymous letter writer described forests ringbarked by selectors. Rough homes stood empty where families had failed to make their small farms pay. Under the *Crown Lands Alienation Act*, people could select no more than one hundred and thirty hectares from the vast grazing estates of squatters.¹⁷ The *Victoria* stopped to load firewood below Murdering Island, where three decades previously squatters had trapped and shot dead up to seventy Ngarrangdhuray

¹³ Morris, *Wagga Wagga*, pp. 76-77.

¹⁴ Eric Irvin (ed.), *Letters from the River*, Wagga Wagga, 1959, p. 3 and p. 46.

¹⁵ Irvin, *Letters from the River*, p. 11.

¹⁶ Gilmore, *Old Days: Old Ways*, p. 134.

¹⁷ C J King, *An Outline of Closer Settlement in New South Wales*, Department of Agriculture, Sydney, 1957, p. 81.

men, women, and children.¹⁸ There near the island, a spacious building erected by Buckingbong squatter Frank Jenkins held bales of wool waiting for shipment.¹⁹

Inland river transport had its problems. The Murrumbidgee lay particularly low during the dry year of 1872. One month, after good rain in the river catchment, six steamboats reached Wagga. For the rest of the year Wagga residents waited in vain.²⁰ Despite the irregularity of river services, Sydney merchants and the New South Wales Government expressed concern over the loss of southern produce to Melbourne markets.²¹ To capture the economic activity and production of the southwest slopes for Sydney, workers pushed the Great Southern Railway west and south from the southern tablelands towards the Murray River and Victoria. In March 1877, the people of Murrumburrah, a village on Murrumbidgee Creek between Binalong and Wallendbeen, celebrated the arrival of the railway. They gathered at the new station, two kilometres east of the settlement.²² The town of Harden grew beside the railway station, and eventually came to dominate local commerce. With the arrival of the railway, Murrumburrah residents and district produce could now travel with relative speed east to Binalong and within hours reach Sydney. Richard Roberts, a Murrumburrah district pastoralist, chaired a lunch at the Commercial Hotel to celebrate the opening of the route.²³ After dinner, Roberts proposed formal toasts to 'The Queen' and 'The Governor'. James Watson, the local member in the Legislative Assembly, asked the gathering to toast 'Prosperity to the district'. Meanwhile, a brass band played in the goods shed, where hundreds of workers and their families assembled for lunch.²⁴

Railway construction teams worked westward to Wallendbeen, then continued southwest towards Cootamundra. Two steam engines hauling ten passenger

¹⁸ Gammage, *Narrandera Shire*, p. 35.

¹⁹ Irvin, *Letters from the River*, p. 17.

²⁰ Irvin, *Letters from the River*, p. 10.

²¹ Gammage, *Narrandera Shire*, p. 217.

²² 'Opening of the Railway to Murrumburrah', *Cootamundra Herald*, 20 March 1877.

²³ Richard Littlejohn, *Early Murrumburrah Historical Notes*, Harden-Murrumburrah Historical Society, no date, pp. 5-6

carriages came to rest beside a new timber and iron railway station on the eastern side of Cootamundra one afternoon in November 1877. On rounded granite hills above the town, spearwood wattles (**garriwang**, *Acacia doratoxylon*) and red stringybarks absorbed the scream of a steam train whistle for the first time. Gundagai musicians 'discoursed animating airs' as New South Wales Government ministers and other dignitaries stepped onto the crowded platform.²⁵ Renowned Sydney caterers Compagnoni & Company served a banquet to district residents and train passengers inside the Albion Hotel, where a giant Union Jack decorated one wall.²⁶ After rounds of toasts at the end of dinner, Minister for Public Works John Lackey rose to speak.²⁷ Lackey, a farmer and publican, did not restrain his enthusiasm for the Great Southern Railway and the agricultural development it promised:

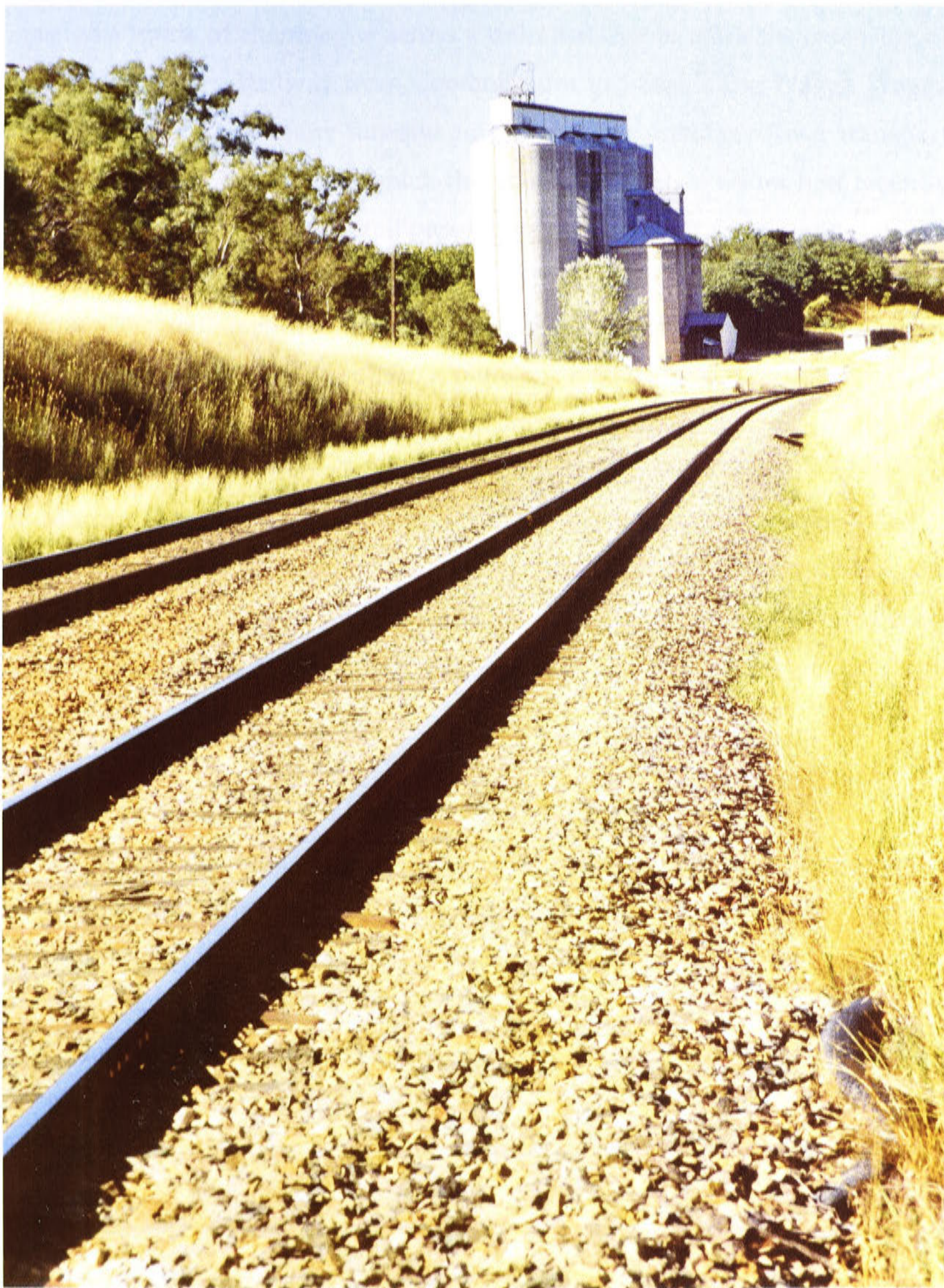
Thank you all for your enthusiastic reception today and for the cordial manner in which you drank to the health of the Ministry. I have no hesitation in saying that all other extensions to this railway sink into insignificance when compared with that which we are now meeting to celebrate (cheers). It is not necessary for me to go into particulars to show the importance of the event of today, for everyone who sees your beautiful district must be struck with its soil ('hear hear'). When one recollects that before the passing of the Land Act such places as this gave homes only to a few stragglers (applause), it is a great source of rejoicing to come now and find it sprinkled with happy homesteads and farms literally waving with wealth (cheers). I am sure that these evidences of prosperity in the future will be realised to the full. I believe this railway will be not alone a benefit to the district, but to the colony as a whole. The railway has tapped the best wheat-growing country in the colony (cheers), which will materially add to its wealth. You might have many administrations, but you will never get one with a more earnest desire to extend the railways. We are now getting into what might be called in truth the gardens of New South Wales. These agricultural districts, with their rich, fertile soils, are the mainstays of the colony's wealth.

²⁴ *Cootamundra Herald*, 20 March 1877.

²⁵ 'Opening of Railway', *Cootamundra Herald*, 6 November 1877.

²⁶ Helen Proudfoot, 'Food and Festivities', in *The 1879 Garden Palace Exhibition, Sydney*, www.fbe.unsw.edu.au/Events/Expo2000/3researchp/3rpaper.htm, accessed May 2003.

²⁷ Martha Rutledge, 'Lackey, Sir John (1830-1903)', Nairn, Serle, and Ward, *Australian Dictionary of Biography 1851-1890*, pp. 48-49.



Railway silos, Wallendbeen, January 2004.

Thank you again for your warm reception. God speed the plough! (loud cheers).²⁸

Eight months later, the daughter of Joseph Leary, Member for Murrumbidgee, smashed a bottle of champagne across a train carriage to mark the extension of the Great Southern Railway from Cootamundra to Junee.²⁹ The Wagga Wagga Steam Navigation Company foresaw an end to Murrumbidgee River transport and sold *Victoria*, the boat on which the anonymous letter writer had recently travelled.³⁰ In September 1878, rail passengers disembarked for the first time beside Murrumbidgee floodplains and river red gums a few miles north of Wagga.³¹ The settlement of North Wagga flourished for a year while workers built an extension across the plain, a pathway raised on viaducts and earthen banks to allow trains passage above floodwaters. Later, trains crossed the river channel over a sturdy timber bridge. Railway tracks linked Wagga to Albury on the Murray River in February 1881. A railway branch line west from Junee to Narrandera came into operation the same month. Sydney merchants and politicians hoped the westward route from Junee would take western Riverina commerce from Melbourne, and along the way turn grazing paddocks into farmland.³²

The network of railway lines kept spreading. A decade after trains first reached Albury and Narrandera, workers laid steel tracks across hardwood sleepers from Cootamundra northwest to Temora. The *Town and Country Journal* thought the Cootamundra to Temora line was 'destined to play an important part in the future development of the interior'.³³ The railway would capture 'a region remarkable for its native beauty and richness of its agricultural and mineral resources, and yet lying dormant awaiting the skill and industry of settlement'. Great ironbark forests near Temora ensured supplies of timber for railway

²⁸ Selected and adapted into first person from a report of the banquet, *Cootamundra Herald*, 6 November 1877.

²⁹ 'Opening of the Railway to Junee', *Cootamundra Herald*, 9 July 1878.

³⁰ Morris, *Wagga Wagga*, p. 77.

³¹ W J Garland, *The History of Wagga Wagga*, Riverina College of Advanced Education, Wagga Wagga, 1984 [1913], p. 6.

³² John Ferry, *Junee and the Great Southern Railway*, Junee Shire Council, Junee, 2001, pp. 12-13.

³³ 'A New Railway Line', *Town and Country Journal*, 19 August 1893.

bridges and sleepers. One part of the district with rich chocolate soils and eighteen inches of annual rainfall promised bountiful crops of wheat, oats, and barley. 'It needs but little faculty of imagination', the *Journal* declared, 'to hear in the near future the hum of the stripper and thresher'. Cutting up wide grazing estates into small farms would 'make the land yield as much increase as nature intended it should.'³⁴

While railways allowed efficient transport of heavy crops to urban markets, obstacles remained to agricultural development on the southwest slopes. Labour was scarce and expensive, especially at harvest time. Only large families with older children planted wide areas to crops. 'Successful farming in this colony, where labour is so expensive, is beyond question without the aid of mechanical appliances', the *Cootamundra Herald* remarked in 1877.³⁵ Wheat harvesting was a time consuming process. Farmers cut ripening crops with handheld sickles, tied the grain-laden stalks into sheaves, then piled the sheaves into stooks. Later, when the sheaves were dry, farmers threshed and winnowed the stalks to separate the grain. They transferred the wheat into hessian bags, loaded the bags on wagons, and carted the harvest to local flourmills and railway terminals.³⁶ Farmers turned hopefully towards British and North American inventions delivered to rural centres by rail. At the Wagga show in 1878, a new machine able to reap cereal crops and bind sheaves with thin wire 'elicited considerable astonishment'. The device, it was claimed, did the work of forty labourers.³⁷ The previous year, just weeks after the opening of the Great Southern Railway extension to Cootamundra, workers rolled a Canadian-made reaper and binder onto the station platform.³⁸ In a nearby paddock, locals witnessed the device fell a crop of oats and automatically gather the stalks into sheaves. Agents sold three that day, and a Cootamundra storekeeper agreed to stock the new machine. In the 1880s, new horse-drawn harvesters entered the market that could strip, thresh, and winnow in one operation. Farmers exchanged single-furrow

³⁴ *Town and Country Journal*, 19 August 1893.

³⁵ *Cootamundra Herald*, 4 December 1877.

³⁶ Halliday, *The Wheat-Growers of South-Western New South Wales*, p. 107.

³⁷ Halliday, *The Wheat-Growers of South-Western New South Wales*, pp. 107-108.

³⁸ 'Trial of Agricultural Machinery', *Cootamundra Herald*, 4 December 1877.



Jack Constant and Peter Harrison stacking bags of wheat at Cunningar railway siding, Harden district, 1926 (Harden-Murrumburrah Museum).

ploughs for wider instruments with three or four blades.³⁹ Swiftly now, cultivated spaces replaced diverse communities of grassland plants.

Railways brought profound change. In the Cootamundra region 'wheat is king', a reporter wrote in 1907.⁴⁰ In the first decade of Federation, people yearned for evidence of national consolidation and worth. Railway construction, the journalist observed, had transformed the district 'from a thinly-populated pastoral centre into a prosperous farming locality.' As well as growing great quantities of wheat, the region carried as many livestock as before agricultural development. For years Cootamundra remained a 'sleeping beauty of the south'. Then the railway woke her. An 'unpretentious wayside hamlet' became 'a fine town',

enjoying the advantages of an enlightened civilisation. Its streets are wide and well-kept, its buildings handsome, and its stability undoubted.

William Corby selected land north of Cootamundra in the early 1870s. A forest of white box, apple box (**dhalawang, gabu**, *Eucalyptus bridgesiana*), and red gum cloaked the selection. 'Now there are 1 500 acres on which scarcely a tree stands', a newspaper reported in 1909, 'and 1 300 of them are growing promising crops of wheat and oats.'⁴¹ Another selector north of Cootamundra near Stockinbingal farmed land once 'heavily timbered'. Now cleared, 'one can look across hundreds of acres of grand wheat land without seeing the sign of a tree or a stump upon it', the journalist remarked.⁴²

Railway tracks enabled the Temora district to prosper too. Ordered domestic gardens and substantial public buildings gave the town an established air. 'Five and twenty years ago the site on which it stands was covered with a dense forest, and at best the settlement was only a collection of canvas tents and bark huts', the *Town and Country Journal* explained in 1909.⁴³ 'Practically the town has

³⁹ Halliday, *The Wheat-Growers of South-Western New South Wales*, p. 110.

⁴⁰ *Town and Country Journal*, 2 January 1907.

⁴¹ 'Progress of Wheat-growing in New South Wales', *Town and Country Journal*, 30 June 1909.

⁴² *Town and Country Journal*, 30 June 1909.

⁴³ 'Through Progressive Districts—Cootamundra to Barellan', *Town and Country Journal*, 30 June 1909.

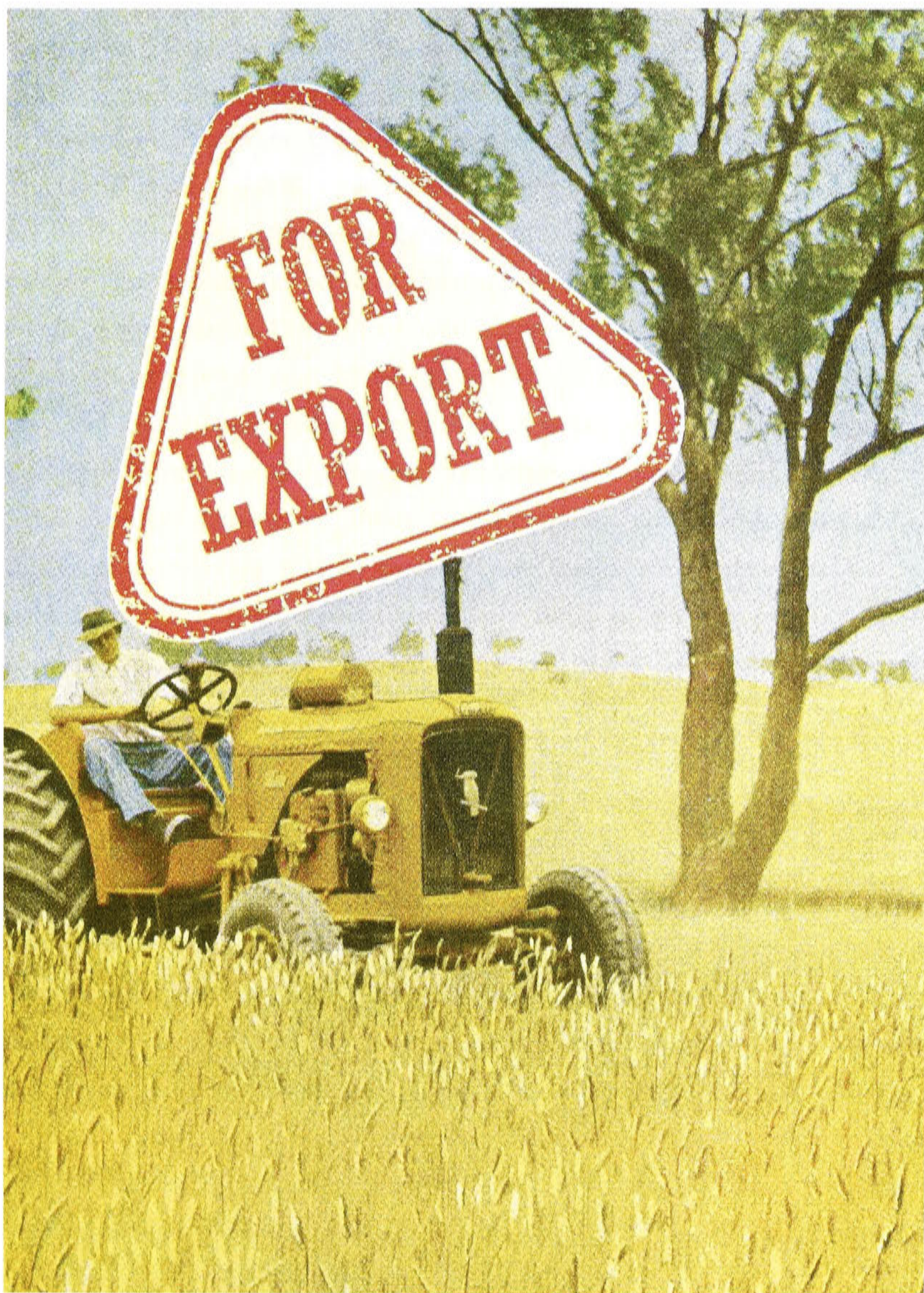
been erected during the last two decades, and it is now one of the most flourishing in the State.' The Cootamundra to Temora railway 'pierced the isolation' of the region between the Murrumbidgee and Lachlan rivers, local historian Rob Webster wrote in 1950, 'like an artery spreading the red blood of trade and commerce'. In the service of distant markets, railway workers and farmers dramatically altered the land:

Gangs of sleeper-cutters scoured the ironbark ridges and swung their broad-axes over the fallen hardwood giants. The big construction camps employed hundreds of navvies and engineers, and carters and teamsters reaped a harvest keeping supplies up to them, while the farmers worked from daylight to dark on their plow-teams, then tended their clearing fires in the yankee-grubbed paddocks so that they could grow more for the bewildering but welcome market.⁴⁴



'FOR EXPORT' reads a red triangular stamp thumped across the photograph. A farmer in a collared shirt and a broad hat holds the steering wheel of a tractor with two hands, driving through a ripe wheat crop. The tractor drags a mechanical harvester, invisible beyond the picture. An eye to the ground, the driver avoids stones and fallen branches that might damage the complex equipment. With care and precision, all standing grain is collected. The scene is mythical, iconic of settler Australia—a productive rural vista turned golden by spring and summer heat. A kookaburra (**gugubarra**, *Dacelo novaeguineae*) motif fixed to its grille, the tractor itself is an expression of nationalism. One eucalypt—perhaps a yellow box—stands alone, rising tall above the paddock. No young trees, wattles, hopbushes (**bururr**, *Dodonaea* spp.), or native grasses are visible. There are no other people. Along the horizon, a sparse line of old eucalypts follows the curve of a hill. Apart from the farmer, the wheat crop, and the mature trees, the land is empty.

⁴⁴ Rob Webster, *The First Fifty Years of Temora*, J A Bradley & Sons, Temora, 1950, p. 80.



Sanitarium Health Food Company advertisement (detail), *Australia To-day*, 1964 annual edition (State Library of New South Wales).

In the 1960s, the Sanitarium Health Food Company used the image of a wheat farmer reaping his crop to advertise a range of breakfast cereals in glossy magazines.⁴⁵ Readers learned that Sanitarium sent processed food products to overseas markets. It seems the company thought domestic demand would rise if Australian consumers knew that people faraway chose Sanitarium cereals. The significance of the illustrated paddock, the advertisement suggested, arose on other continents. Dangerous dynamics operate within export-oriented agriculture. The global marketplace diverts attention away from the ecological needs of rural places. Destructive actions are promoted. For example, if global wheat prices soar and a creditor demands repayment from a farmer, the farmer may feel forced to sow wheat, regardless of possible ecological consequences. Geographic and cultural divides between urban consumers and rural producers helps maintain demand for uniform food products, not diverse, seasonal produce. Consumers cannot easily come to know and care for farmers and the particular natural patterns of rural places, nor begin to see how production and consumption may be integrated within local ecologies. Responsive relations are blocked.

Since the onset of colonisation, the operation of global trading networks shaped perceptions of Australian rural places. In 1848, English philosopher and economist John Stuart Mill described the British colonies as 'hardly to be looked upon as countries, carrying on an exchange of commodities with other countries, but more properly as outlying agricultural or manufacturing estates belonging to a larger community.'⁴⁶ Production and export of primary produce gave Australian settlers purpose and identity within the British Empire. According to popular agrarian mythology, small farmers were the most suitable proprietors of rural land.⁴⁷ In exchange for exported manufactured goods, Britain absorbed surplus Australian primary production. Like any story, the Australian agrarian

⁴⁵ 'Australia's finest range of health foods', *Australia To-day*, United Commercial Travellers' Association of Australasia, Melbourne, 1964, p. 91.

⁴⁶ John Stuart Mill, quoted in Edward W Said, *Culture & Imperialism*, Vintage, London, 1994, p. 108.

⁴⁷ Ken Fry, 'Soldier Settlement and the Australian Agrarian Myth after the First World War', *Labour History*, Canberra, no. 48, May 1985.

myth served certain interests. The population of England, Scotland, and Wales exploded over the nineteenth century, tripling to forty million.⁴⁸ Centuries of industrialisation and urban expansion made Britain largely dependent on food produced elsewhere. When the Australian colonies federated at the start of the twentieth century, people sought ways to consolidate the new nation. Australians hoped to foster stable and conservative farming communities, a firm national foundation.

'The Breaking of the Drought', a cheerful song-advertisement published in 1904 by Massey-Harris, a British and Canadian farm machinery manufacturing company, reflected and reinforced Australian agrarian mythology and the dynamics of nation and empire it served.⁴⁹ Good rain has ended a miserable drought, and a bumper wheat harvest is on the way:

Things are merry in the country
Where a year or two ago
You never met a farmer but you heard a tale of woe.
For the days of drought are over,
Days of dust and sand and heat,
And the summer once again will see the harvest of the wheat.
Wheat! Wheat! That picks a broken country up and sets it on its feet.

The value of wheat ripening in Australian paddocks rises in faraway London:

The man who has a bit of land forgets his troubles old,
When day by day he sees the green grow ripening into gold.
And round his happy homestead there was never sound more sweet,
Than the whisper of the breezes as they rustle through the wheat.
Wheat! Wheat! That will turn to golden guineas when the London bankers
meet.

⁴⁸ Geoffrey Bolton, *Spoils and Spoilers: Australians make their environment 1788-1980*, Allen and Unwin, North Sydney, 1981, p. 21.

⁴⁹ William Creser, *The Breaking of the Drought*, Massey-Harris Co. Ltd, London, 1904, copy held by the National Library of Australia.

Money waiting in London promises to erase hardship from the wheat farms of Australia:

There is schooling for the kiddies,
There's a present for the wife,
And a cheque to pay the doctor for the time he saved her life;
There is cash to meet the past due bill that almost had him beat,
And a little fixed deposit in those waving fields of wheat.
Wheat! Wheat! He will face his banker boldly when the harvest is complete.

A global trading network delivers this happy turnaround in local fortunes. Exchanged for Australian wheat, British and Canadian machines are sent inland by rail:

The Massey-Harris binders go on ev'ry railway train,
And their Harvesters are rolling out to reap the golden grain.
All the ports are getting ready to accommodate the fleet
That is heading for Australia just to take away her wheat.
Wheat! Wheat! Five million golden acres for the world to buy and eat!



In springtime I took a rough dirt road past old apple box trees. They stood alone in paddocks glowing yellow with flowering canola. My car headed down the pathway to a creek then rose again across the opposite slope. Connaughtmans Creek curves round a hillside where the road meets double gates of weathered iron and rabbit netting. Parking the car, I noticed an ancient poplar tree nearby, stocky and venerable. I unhooked the gate chain and walked into the area called Hardies Reserve. A brown bottle discarded decades ago lay beside native geranium (*Geranium solanderi*) on a granite outcrop. Lomandra trimmed by sheep grew between the stones, a plant also called 'cockies boot-

laces.⁵⁰ Perhaps impoverished 'cockies'—nineteenth century farmers of small acreages—did use the sturdy, straplike leaves as bootlaces. Aborigines split lomandra leaves into strips to weave dilly bags and mats.⁵¹

The track into the travelling stock reserve levels out beside Connaughtmans Creek. Walking, I noticed a yellow-brown piece of snake-necked turtle shell on the sandy path. Further along, rubber tyres had pressed a stone flake with a sharp edge into the road. My finger traced the bulb rising from the grey, fine-grained material, evidence of a hammer-stone striking the flake from a larger core. I left the track and climbed a gentle slope past tussocks of spear grass (*Austrostipa* spp.) towards yellow box saplings. A chocolate lily flower stem swayed near fallen branches. Deane's wattle (*Acacia deanii*) stood in dark clumps among rocks. I walked down to the waterway, past sheep bones and flecks of wool, into the shade of an old weeping willow. Fresh leaves emerged on pendulous branches.

Frogs called in the creek. Stems of common reed (**balandalabadin, gubudha**, *Phragmites australis*) rose from water and mud. The tall aquatic grass is no longer very common on the southwest slopes. Cattle relish its fresh spring growth. Wiradjuri made spears from cumbungi and common reed stems.⁵² Aborigines of the Murrumbidgee region fashioned 'a light spear of a reed', explorer Charles Sturt noted, and threw them 'to a great distance and with unerring precision'.⁵³ Demondrille is an agricultural area and railway siding east of Wallendbeen, near Harden. James Larmer, an early surveyor, carefully recorded local placenames from Wiradjuri people. 'Demondrille', Larmer explained, referred to a plant, possibly common reed, which grew there before the arrival of cattle, from which Wiradjuri made spears.⁵⁴ Across southern Australia, Aborigines ate the spring shoots and young flower stalks of cumbungi. They

⁵⁰ Fleur Stelling (ed.), *South West Slopes Revegetation Guide*, Murray Catchment Management Committee and Department of Land and Water Conservation, Albury, 1998, p. 387.

⁵¹ Low, *Wild Food Plants of Australia*, p. 118.

⁵² Dick Green, *Wiradjuri Heritage Study*, Wagga Wagga City Council, Wagga Wagga, 2002, p. 32.

⁵³ Charles Sturt, *Two Expeditions into the Interior of Southern Australia, during the years 1828, 1829, 1830, and 1831*, Smith, Elder and Co., London, 1833, p. 54.



Common reed, Coolac district, August 2001.

roasted the starchy rhizomes of the aquatic plant in ashes or steamed them in earth ovens. Aborigines processed cumbungi fibre into string to weave fishing lines, nets, bags, baskets, waistbelts, and browbands. Beside the channel of Connaughtmans Creek near Wallendbeen, I watched small birds dart among dry cumbungi leaves. Aborigines in southeast Australia regularly burned cumbungi when stands dried, ethnobotanist Beth Gott noted. Burning fertilised the plants with ash, enabled sunlight to nourish emerging shoots, and made rhizome harvesting easier.⁵⁵

The primary local pathway of settler travel and trade once crossed Connaughtmans Creek here, inside Hardies Reserve. Dark pines in a paddock to the west mark the site of Wallendbeen station's first homestead, a simple building of eucalypt slab walls.⁵⁶ Traffic from the south and west converged at Wallendbeen and continued eastward through Murrumburrah, onto the southern tablelands, then to Sydney. Teamsters drove bullock wagons along the road, delivering wool to Sydney and collecting supplies. When the Great Southern Railway arrived in the late 1870s, Wallendbeen village grew northwest of the station homestead. Surveyors marked out a new road along a ridgeline north of Connaughtmans Creek. The New South Wales Government set aside Hardies Reserve for travelling stock in 1883.⁵⁷ Drovers moving sheep, cattle, and horses periodically camped here, beside Connaughtmans Creek. Unlike most inland slopes, travelling stock reserves were never subjected to repeated cultivation, continuous grazing, and artificial fertilisation. Weeks or months of rest followed days of intense grazing pressure, a process perhaps similar in effect to Wiradjuri burning practices. Travelling stock reserves are rare places. Inside, a diversity of plants may flower, set seed, germinate, and grow.

⁵⁴ James Larmer, 'Aboriginal Names of Places in Various Parts of New South Wales', *Science of Man and Journal of the Royal Anthropological Society of Australasia*, 23 April 1900, p. 47.

⁵⁵ Beth Gott, 'Cumbungi, *Typha* species: a staple Aboriginal food in southern Australia', *Australian Aboriginal Studies*, 1999, no. 1, pp. 33-50.

⁵⁶ Peter Freeman, *The Homestead: a Riverina Anthology*, Oxford University Press, Melbourne, 1982, p. 106.

⁵⁷ NSW Department of Lands, 'Parish of Wallendoon', 1892, www.lpi.nsw.gov.au/maps/pmap/search/pmap_websearch.display, accessed May 2003.

I left the cool shade of the willow tree and headed upstream to where the track crosses the narrow waterway. On the western bank, weathered timber beams protrude from dark earth. The rotten pieces of wood look like the remains of an early road bridge. On the other side of Connaughtmans Creek, I noticed many stones carted and dumped, a solid path for heavy wagons and mobs of sheep. A wide network of shallow gullies lies across the hillside to the east. Some gullies are active, others grassed over. It appears erosion forced the roadway to shift many times. I walked uphill across the eroded surface towards a dip in the skyline where the abandoned road begins to descend down the other side. Dark, glossy leaves of apple box trees glistened in the afternoon breeze. The drawn whistle of a diesel train entering Wallendbeen came from the west, then a rumble of carriages heavy with grain or shipping containers. A small brown hawk appeared above me, perhaps a brown goshawk (possibly **dunandinang**, *Accipiter fasciatus*), circling and chattering, narrow wings beating swiftly.⁵⁸ I had disturbed the bird, my presence resented. For a moment the predatory bird hovered above a tall jumble of split boulders, encrusted with lichen. I gazed into the shadowy spaces between the stones, and wondered what early settlers imagined as they travelled by, encountering these slopes for the first time. From the east, along the pathway through Hardies Reserve, came hopeful, restless colonists. In the other direction, to Sydney and its port, went gold nuggets, bales of wool, herds of cattle, and bags of wheat.

Francis Sweeny journeyed westward along the road towards Wallendbeen in 1870 with his friends Irwin Smith and James Morrow. The men grew up together in rural Northern Ireland. In Australia, they carved dairy farms from coastal forest south of Sydney. Years later, when the New South Wales Government encouraged closer settlement inland, the three young men headed west across the Great Dividing Range. Near Goulburn, a bullock wagon driver advised the Irishmen to keep going until they reached Connaughtmans Creek, beyond the village of Murrumburrah. They selected land on Wallendbeen sta-

⁵⁸ Pizzey and Knight, *Field Guide to the Birds of Australia*, p. 130.

tion, then returned east to collect their families.⁵⁹ Hardies Reserve was once part of Allowrie, the farm established by Irwin Smith and his family. Church of England ministers delivered sermons inside the Smith family homestead. In 1876, parishioners built a church from eucalypt slabs on Allowrie, beside the main road on land now inside the travelling stock reserve. When the railway came, they moved the church to a new site in Wallendbeen village.⁶⁰

Francis Sweeny and James Morrow selected land at Cullinga, a few kilometres south of Allowrie. As an old man, Francis Sweeny's son Frank told his niece about the early days on Brae Farm, the Sweeny family selection. Before his father built fences, Frank Sweeny said, bullocks would disappear into expanses of tall kangaroo grass. Francis strapped bells to the necks of the beasts to save trouble searching for them. On a low stretch of land, the selector sank a well and found fresh water six feet down. Francis Sweeny ringbarked box trees and red gums with a sharp axe. He lit fires in pits dug below each trunk. Falling branches shattered on the ground as the dead trees burned. Sweeny gathered fallen wood and set about burning down other ringbarked trees. Having cleared the eucalypts, he enclosed the new cropping paddock with a brush fence made from smaller trees. Cullinga district farmers first planted maize. Between each row they grew pumpkins, watermelons, and pie melons. In the following season the new selectors sowed paddocks to wheat.

When Francis first cultivated a paddock on Brae Farm, taproots and tubers—his son Frank called them 'wild carrot roots'—accumulated on his single-furrow plough, temporarily stopping its progress. Many grassy woodland herbs grow fleshy roots. Taproots and tubers enable the plants to survive fires and droughts. Before agricultural colonisation, Wiradjuri dug into the red basalt soil of Wallendbeen and Cullinga to harvest roots and tubers. Yam daisies, milkmaids (possibly **burrugurra**, *Burchardia umbellata*), chocolate lilies, early nancy (*Wurmbea dioica*), native geranium, and other species offered a diverse selec-

⁵⁹ Frank Sweeny, 'Early Settlers at Cullinga', as dictated to his niece Mrs Dixon, Harden-Murrumburrah Historical Society bulletins 1974-1975.

⁶⁰ 'Celebrating centenary', *Cootamundra Herald*, 11 April 2003.

tion.⁶¹ Francis Sweeny had trouble removing the many roots and tubers gathered on his plough. The problem did not recur the following season. Tuberous grassy woodland herbs no longer grew inside the paddock on Brae Farm.



Ardrossan is a harbour town on the rocky western coast of Scotland. Shipbuilding and sea trade flourished there in the nineteenth century. When my parents visited Ardrossan late in the 1990s, they found a bleak and depressed town. Manufacturing and export companies were gone, the commercial port closed. I downloaded a copy of an old watercolour painting of Ardrossan harbour from a website.⁶² In the tranquil scene, masts rise from ships resting in glassy water. Seabirds fly above a sandy beach. Rugged mountains fall to the sea.

My grandfather called his grazing property 'Ardrossan'. I remember a gravelly dam wall, a hillside of bleached grass, white cypress pines against blue sky, a patch of bush near the house, yellow box trees along the track, and kurrajongs (*garradyang*, *yama*, *Brachychiton populneus*) at the ramp. My grandfather never visited Scotland or the distant town of Ardrossan. His family lived there for several generations in the nineteenth century, perhaps when someone painted the picturesque seaside image I found on the web. Over the course of a century, his paternal ancestors moved west to Ardrossan from the eastern coast of Scotland, to Australia and southern England.

Modern restlessness and desire for material and social advance drove my ancestors and other western Europeans to distant places, then on again. Colonists showed commitment to movement and progress, not places or communities. Reflecting mobile tendencies, they built transportable identities based on patriarchal lines of descent. Unlike active relations with people and terrains, family

⁶¹ Cootamundra Shire Council, 'Annexure A. Species list for Wallendbeen Cemetery', in *Plan of Management, Wallendbeen Cemetery*, 2001, pp. 17-18; and Low, *Wild Food Plants*, pp. 213-15.

⁶² www.fife.50megs.com/Old%20Scenes%20Album/pages/Old%20Ardrossan,%20Ayrshire.jpg.htm, accessed November 2002.



Kurrajong tree, Treetops, Cootamundra district, October 2002.

histories and trees could be written down, charted, memorised, taken away. The name my grandfather selected for his grazing property on the southwest slopes did not reflect natural particularities of the local area. His choice, 'Ardrossan', spoke of movement down patrilineal and geographic pathways. The name arose elsewhere, like the demands of distant markets for the wool my grandfather grew and sent away.

Thirty kilometres east of the rural property Ardrossan is a place Wiradjuri called 'Gudhamangdhuray', now known as 'Cootamundra'. Turtles were ecologically, socially, and spiritually significant to Gudhamangdhuray clanspeople. Cootamundra is probably a turtle Dreaming place.⁶³ In swampland below rounded granite hills, sanctuary law protected the reptiles from hunting. According to early anthropologist and explorer Alfred Howitt, the 'Kuta-mundra' clan was one of three major southern Wiradjuri groups between the southern tablelands in the east and the western Riverina plains. The swampy place on Muttama Creek where colonists established the town of Cootamundra, Howitt noted, was the centre of Gudhamangdhuray clan territory. Other southern Wiradjuri clans were based where the towns Narrandera and Murrumburrah are today located.⁶⁴

Howitt recorded the meaning of 'Kuta-mundra' as 'river turtle'. In Wiradjuri, 'gudhamang' denotes 'turtle', linguists Sally McNicol and Dianne Hosking explain, and more particularly 'perhaps striped'.⁶⁵ Murray turtles (*warramba*, *Emydura macquarii*) inhabit river channels and major waterholes across the Murray-Darling Basin. The species is marked by a stripe—pale yellow along its lower jaw—and is considered a river turtle.⁶⁶ Perhaps Murray turtles swam and reproduced freely in Muttama Creek swampland. From archival and oral sources, Wiradjuri language teachers Stan Grant Sr and John Rudder made an

⁶³ See Introduction.

⁶⁴ Howitt, *The Native Tribes of South-East Australia*, p. 56.

⁶⁵ Sally McNicol and Dianne Hosking, 'Wiradjuri', in Nick Thieberger and William McGregor (eds), *Macquarie Aboriginal Words*, Macquarie University, 1994, p. 90.

⁶⁶ Harold G Cogger, *Reptiles and Amphibians of Australia*, Reed New Holland, Sydney, 2000, pp. 197-198.

informed guess that 'gudhamang' refers to the eastern snake-necked turtle.⁶⁷ Maybe Gudhamangdhuray clanspeople gave several freshwater turtle species refuge. Details are obscure, possibly lost. Colonial processes of death and displacement erased rich bodies of local knowledge. People of the Cootamundra area probably called themselves 'Gudhamangdhuraymayiny', Wiradjuri elder Stan Grant told me. The added suffix '-mayiny' means 'people', forming a word denoting 'turtle-having-people'.⁶⁸ Turtles were kin, family to care for and receive life from.⁶⁹ Wiradjuri belonging to Muttama Creek swampland wove turtles and place into personal and group identities. They looked sideways for definition of self and clan, towards rushes and river gums, in understanding of embeddedness in place.

Demanding production

One night in September 1924, Sir Dudley and Lady de Chair journeyed southwest from Sydney in a vice-regal carriage hitched to the Albury mail train.⁷⁰ Morning sunlight caught the train passing green crops of wheat and oats. Sir Dudley, Governor of New South Wales, arrived in Cootamundra to open the annual show. Inside showground pavilions, judges inspected entries of merino wool, butter, lucerne hay, wheat and barley.⁷¹ Sir Dudley and Lady de Chair toured the district. They watched sheep shearing at Glen Iris station, near Bethungra. At the Cootamundra Town Hall, an ornate Victorian building, civic leaders gave the Governor an illuminated address, a rectangle of cardboard adorned with watercoloured roses, honeysuckle, pansies, and gilded scrolls.⁷² Text penned in a fancy style declared loyalty to 'the Throne and Person' of King

⁶⁷ John Rudder, telephone conversation, 9 February 2004.

⁶⁸ Stan Grant, conversation at Canberra, 16 April 2002.

⁶⁹ See Introduction.

⁷⁰ Patricia Caskie, *Cootamundra 1901-1924: Past Imperfect*, Annwel Enterprises, Cootamundra, 2000, p. 373.

⁷¹ *Wagga Wagga Advertiser*, 3 September 1924.

⁷² *Address to Sir Dudley de Chair*, Mitchell Library, reference number *D184.

George. In the recent European war, the presentation read, 'exceedingly large numbers' of Cootamundra district men had fought for the British Empire. The address offered Sir Dudley 'a sincere and hearty welcome to this one of the leading producing centres of the State'.

When Sir Dudley and Lady de Chair visited Cootamundra in 1924, the Catholic Church on Morris Street was eight years old. The voluminous redbrick building still looms above the town. It remained the most prominent structure in Cootamundra for almost seventy years. Workers began constructing a new silo complex beside the railway line in the winter of 1981. The central elevating tower would rise more than fifty metres, the *Cootamundra Herald* marvelled, twice as high as the post office clock tower.⁷³ According to the newspaper, the new complex promised 'to be more than just a tourist attraction and a talking point—it is to serve primary production.' Today, when people climb one of the stony hills beside Cootamundra, they see three giant white silos dwarfing streets, houses, and the Catholic Church. At the silo facility beside the railway line, machinery lifts grain skyward before sending it down chutes to tumble through dark storage space. Between the steel monoliths, pigeons flap and disappear into shadows. Wheat trucks roll across quarried stone to deliver produce from local paddocks. Heavy trains rumble away, hauling the harvest to urban granaries and seaside export terminals.

GrainCorp, a corporate authority responsible for grain storage and delivery across southeast Australia, issues stylised maps of the infrastructure it controls. The maps show the names and locations of silos on a network of railway lines linking the western slopes and plains of New South Wales to coastal centres. I picked up a copy from the GrainCorp office in Cootamundra.⁷⁴ Blue lines run across the southwest slopes. Silo complexes beside towns and paddocks are marked and named in succession. One rail and silo pathway runs east from the western margins of the southwest slopes towards Junee: Narrandera-Grong Grong-Matong-Ganmain-Brushwood-Coolamon-Marrar-Old Junee. Lines con-

⁷³ 'Coota landmark under construction', *Cootamundra Herald*, 3 July 1981.

⁷⁴ GrainCorp, 'Grain Storage Network and Infofax Zones', c. 2000.

verge at a black circle signifying the giant silos beside the railway line at Cootamundra. A single blue path runs east to the coast—fast and straight as a farm auger—to the export terminal below Sydney at Port Kembla, a larger black circle on the map. Green lines converge from districts on the central slopes into a single path heading east to Sydney. From the north, red and orange pathways feed south and east towards a black point denoting Newcastle, a port city above Sydney. The coloured pathways look like great river deltas operating in reverse. Lines indicate the drawing of moisture and nutrients together into single channels from a wide area. Trains deliver vast quantities of grain to central points of consumption and export. In 2001, more than sixteen million tons of wheat—most of the national annual harvest of about twenty million tons—left Australian shores on cargo ships.⁷⁵

Jack Hallam, New South Wales Minister for Agriculture, arrived in Cootamundra for the official opening of the new silo complex in September 1982. A photograph in the *Cootamundra Herald* shows seven men posing as Hallam draws a curtain and uncovers a brass plaque. At the time, southeast Australia was enduring a major drought. Farmers drove away from bare paddocks to join the ceremony and look over the silo complex. Ross Faulks, a local farmer and President of the Cootamundra Silo Committee, told the crowd that in the early 1960s less than four thousand tons of wheat entered the silos at Cootamundra at harvest time. Now about forty thousand tons were trucked to the railway storages each summer. A much larger silo facility was badly needed. The new complex could take grain twice as fast as before—up to four hundred tons per hour. Each of the three welded-steel containers could store ten thousand tons of grain. Operators used remote control technology. Transfer of grain between trucks, silos, and railway carriages required only two workers. Minister Jack Hallam said the State Government was determined to minimise costs and foster economic development. The droughty hillsides beyond the town did not suppress his optimism. 'I am sure that continuing developments in wheat production

⁷⁵ Australian Wheat Board, 'World Wheat Production, Trade and Stocks', www.awb.com.au/AWB/user/communityEducation/e43.asp, accessed December 2002.



Railway silos, Cootamundra, January 2004.

will result in district producers utilising this valuable facility to the fullest extent in the future', Hallam told the crowd.⁷⁶

At the end of World War Two, Australian wheat farmers harvested about half a ton from each hectare of crop. By 1990, average yields had tripled.⁷⁷ In the face of declining terms of trade and strengthening global competition, farmers adopted new plant varieties and agricultural technologies to push rising quantities of produce from paddocks. Pressure from global trading markets to maximise primary production corresponded with official economic agendas. Policy makers abandoned old notions implicit in land legislation since the introduction of the Robertson Land Acts in 1861. Family farming was no longer honoured and protected as a stable foundation for society and the nation. In the 1980s, as words like 'deregulation', 'privatisation', 'Reaganomics', 'Thatcherism', and 'transnational' entered the Australian lexicon, people began to see rural land primarily as the material basis of a competitive global system of industrial production and trade.⁷⁸ Australian bureaucrats worked within international teams to free agricultural commodity trade from economic barriers they considered restrictive and inefficient. According to dominant opinion, Australian economic competitiveness depended on the aggressive promotion of free trade. In 1991, the Federal Government announced a timetable for the dismantling of all protective tariffs and quotas.⁷⁹ For generations, producer cooperatives and statutory marketing authorities had found ways to protect farmers against the uncertainties of global markets. The rise of strident, neo-liberal economic theories saw these organisations dismantled or corporatised. Dissenters were few. Even the National Farmers' Federation supported the free trade agenda.⁸⁰ In Australia and across the globe, as Indian activist Vandana Shiva observes, eco-

⁷⁶ 'Hallam opens \$2m wheat bins', *Cootamundra Herald*, 29 September 1982.

⁷⁷ Greg Whitwell, *A Shared Harvest: the Australian Wheat Industry, 1939-1989*, Macmillan, South Melbourne, 1991, p. 69.

⁷⁸ Susan Butler (ed.), *The Macquarie Dictionary of New Words*, The Macquarie Library Pty Ltd, Macquarie University, 1990.

⁷⁹ Bill Pritchard, 'Negotiating the Two-Edged Sword of Agricultural Trade Liberalisation: Trade Policy and its Protectionist Discontents', in Pritchard and McManus, *Land of Discontent*, pp. 90-104.

⁸⁰ Pritchard, 'Negotiating the Two-Edged Sword of Agricultural Trade Liberalisation', p. 93.

conomic fundamentalism turned 'protection', a term denoting care and respect, into 'a dirty word, the worst crime of the global market place.'⁸¹

Owen Whitaker's ancestors began farming in the Mitta Mitta district, east of Junee, in the 1870s. He described the immense risks farmers today must take as they strive to generate vast quantities of primary produce.⁸² Generations ago, Owen explained, farm business risks were generally smaller, and were shared among the local community. In the past when things were tough on the farm, Owen's aunts and uncles told him, shop owners rarely demanded immediate payment for goods. Farming families grew most of their own food and were less dependent on external networks. Today, Owen observed, farmland and people suffer under the intense demands of the modern economic system. In the 1930s, when drought struck or prices collapsed, his grandfather and grandmother may have lost a few hundred pounds, but they were able to carry on. 'Nowadays it's a huge blow', Owen said, 'and you've got the bank chasing you, and you've got compounding interest rates, and refinancing and all the rest of it.' In recent decades, government policies and powerful economic forces drove land managers to adopt a high-input, high-output model of farming, a management system characterised by great risks and costs:

There's bigger stakes, much bigger stakes involved in agriculture today. This situation has to affect the people and the landscape much more. Something's got to pay for that. As you've got bigger inputs, you've got more and more people disconnected with the farm that you've got to pay every year. And there's only two ways you're going to pay them. One is through increased net income from production, and the other way is with finance. Sooner or later the land has got to pay, it's got to get that extra return to allow for the ever-increasing inputs. And that comes as a very negative force with strong imperatives driving higher production against the future best interests of the land or its people.

⁸¹ Vandana Shiva, 'The Violence of Globalisation', *The Hindu*, 25 March 2001, www.kahea.org/lcr/pdf/vandana_shiva.pdf, accessed November 2003.

⁸² Owen Whitaker, conversation at Oakley, Mitta Mitta district, 18 March 2003.

Forces propelling and shaping production systems emanate from the global marketplace, a domain in which individual farmers are powerless. While farmers must respond to globalised economic pressures, powerful market structures remain unresponsive to social and ecological needs rising locally in agricultural regions. Owen took over the management of the family farm at Mitta Mitta from his father in the late 1970s. 'Don't overcapitalise, don't push your land too hard, rely more on its natural production attributes', his father told him. Looking back over his decades as a farmer, Owen saw the wisdom of his father's advice:

Don't kill the greatest wealth of the land—it's ability to produce naturally. Because, that's the only thing that can keep you independent. And that's a great thing about being a farmer—to retain your independence. And I believe that we're losing that. We're losing it so severely. And what have you got then? You're living in a community with a degraded landscape, with a degraded infrastructure. That means that your kids don't want to be around or they can't afford to be around. And if you lose that, and if you lose your independence to be able to produce in your own right, using a natural nutrient-cycling system, really what have you got? You've got a business that produces a commodity in a climate that is very erratic, producing into a market that is dictated by overseas interests that you have no control of, in a production system that you've lost control of because you have to buy an ever-increasing amount of inputs.⁸³

In the 1980s and 1990s, as Australian agriculture became increasingly exposed to the insistent and inflexible demands of the global marketplace, an ideology of productionism began to dominate farming life. Agricultural and environmental ethicist Paul Thompson defines productionism as 'the philosophy that emerges when production is taken to be the sole norm for ethically evaluating agriculture'.⁸⁴ Australian sociologist Geoffrey Lawrence considers the term to mean 'the system of agriculture in which efficiency and productivity goals are privi-

⁸³ Owen Whitaker, 18 March 2003.

⁸⁴ Paul B Thompson, *The Spirit of the Soil: Agriculture and Environmental Ethics*, Routledge, London, 1995, p. 48.

leged over environmental and community-based desires and concerns.⁸⁵ According to Lawrence, productionism 'justifies the use of 'high tech' solutions to problems, and tends to place farmers on a technological treadmill.' Productionist tendencies are visible throughout Australian agriculture. In 2002, chairman of the Australian Wheat Board Trevor Flugge argued that a five million ton rise in Australian wheat production over five years and its export into a global market he described as 'absolutely and completely oversupplied' demonstrated the success of the Board under his leadership.⁸⁶ Only a minor widening of concern beyond production is required before the absurdity of Flugge's narrow, productionist approach becomes clear.

Representations of Australian rural places almost exclusively in terms of production reflect and help maintain a dominant culture of productionism. 'Wheat, canola, stone fruit, wool, wine, mustard oil, lamb, beef and livestock are but a few of the products from the area affectionately known as Australia's Produce Supermarket', the Harden Shire Council website reads.⁸⁷ At Wallendbeen, twenty kilometres west of Harden, a number of sculptures stand beside a busy intersection.⁸⁸ 'CELEBRATING THE AUSTRALIAN WHEAT INDUSTRY' declares a timber sign. Concrete pillars resembling wheat stalks support acrylic panels, each representing a grain-filled head of wheat. At night, fibre cables cast shifting light through the panels to evoke wheat crops rippling in spring breezes. Green gives way to gold, suggesting an approaching harvest. Further south, drivers entering Junee Shire pass a sign decorated with official district motifs: one fat lamb, three sheaves of wheat, two bunches of grapes, and a train engine.

A particular model of agricultural production and trade shaped by western culture and colonial history underlies the ecological disordering of rural places.

⁸⁵ Geoffrey Lawrence, 'Who controls our future?', *Proceedings of the 9th Australian Agronomy Conference*, Wagga Wagga, 1998, www.regional.org.au/au/asa/1998/plenary/lawrence.htm, accessed November 2003.

⁸⁶ 'Against the grain', *The Land*, 21 March 2002.

⁸⁷ 'Business Development in the Harden Shire', www.harden.nsw.gov.au/Council-files/busdevelopment.htm, accessed December 2002.

⁸⁸ See 'Unremembered voices', Chapter Five.

Demand for uniform primary products rises elsewhere, in the global marketplace, and land is harnessed in response. Export-oriented agricultural systems encourage prioritisation of relatively short-term economic demands above the longer-term needs of local ecologies. Dominant representations of rural places reflect and reaffirm a destructive dynamic. As forester and biologist Aldo Leopold argued, seeing land predominantly in commercial terms leads to the neglect and elimination of elements lacking immediate economic value.⁸⁹ An assumption that economic components of farmland would continue functioning without the presence of uneconomic parts underlay the development of Australian agriculture. Until recently, the ecological blindness of industrial farming pervaded Australian tax law. For decades before legislative changes in 1983, primary producers were not required to pay tax on income used in 'the draining of swamp or low-lying lands where that operation improves the agricultural or grazing value of the land', nor in 'the destruction and removal of timber, scrub or undergrowth indigenous to the land'.⁹⁰

Drivers nearing Harden from the east pass a grain storage facility beside the railway line at Cunnigar. On the outskirts of town is a road sign: 'HARDEN, CENTRE OF THE BEST WHEAT GROWING LAND IN AUSTRALIA'. Four ripe, grain-filled heads of wheat decorate the celebratory metal sign. The abundant yields often delivered by industrial farming methods give an illusion that all is right and well in modern agriculture. Emphasis on bounteous production, agricultural reformer Wes Jackson observes, tends to obscure ecological costs.⁹¹ In 1999, the New South Wales Department of Land and Water Conservation rated Jugiong Creek, a major waterway draining the Harden district, the most degraded stream in the entire Murrumbidgee River catchment.⁹² If we look beyond production and consider ecological stability and wellbeing, it appears the

⁸⁹ Aldo Leopold, *A Sand County Almanac and Sketches Here and There*, Oxford University Press, New York, 1987 [1949], p. 214.

⁹⁰ Australian Taxation Office, *Income Tax Assessment Act 1936*, Section 75A, 'Deduction of Certain Expenditure on Land used for Primary Production'. <http://law.ato.gov.au/atolaw/view.htm>, accessed February 2003.

⁹¹ Wes Jackson, *Altars of Unhewn Stone: Science and the Earth*, North Point Press, New York, 1987, p. 6.

⁹² Department of Land and Water Conservation, *Murrumbidgee Catchment Stressed Rivers Assessment Report*, August 1999, p. 57.

Harden district is particularly unsuited to the broadscale, industrial style of wheat production practised there today.

In the last decades of the twentieth century, productionist agriculture generated an array of ecological problems on the southwest slopes. Responding to patterns of disorder, government agencies and agribusiness groups unfortunately reaffirmed productionist imperatives. Few people questioned the appropriateness of high-input, high-output, export-oriented farming, a production model diverting attention away from the ecological and social needs of rural regions. Instead, responses tended to reinforce established relations of human mastery over rural places. Farmland remained commonly perceived as a 'natural resource' available for industrial use within global systems of production and trade. The dominant framework of modern farming abstracts people from natural systems, positioning humanity above and in control over rural terrains. In 1999, the Federal Government published a discussion paper, *Managing Natural Resources in Rural Australia for a Sustainable Future*. Government agencies prepared the paper in collaboration with landholders, scientists, agribusiness representatives, and conservationists. To guide the formation of national policy, the discussion paper listed a set of principles. 'Ecologically sustainable development', the first principle, reflected a widespread belief that the function of natural systems is to serve people and the economy:

Ecologically sustainable development—which involves maintaining and enhancing healthy ecosystems and biodiversity and using resources soundly for continuing wealth creation to meet social aspirations—is the framework for managing our natural resources, now and in the future.⁹³

Declining terms of trade and intense global competition set in motion socially and ecologically destructive dynamics. Farm managers applying mainstream, industrial production methods use great amounts of fertilisers, herbicides, and insecticides to make rural places produce vast quantities of output. According

⁹³ Commonwealth of Australia, *Managing Natural Resources in Rural Australia for a Sustainable Future: A discussion paper for developing a national policy*, December 1999, www.napswq.gov.au/publications/nrm-discussion.html, accessed July 2003.



Road sign, Harden, October 2001.

to Mark Harris, a Wagga farm management consultant, broadacre farmers should follow three simple rules if they are to remain profitable: 'know what you do well, produce as much of it as possible, and produce it as cost effectively as possible.'⁹⁴ Attention to components of the land seen as not contributing to high productivity does not, in the short term, make economic sense. As governments undermined social security systems late in the twentieth century, people failing to compete economically faced painful consequences. Desperation to maintain high and rising levels of production helped drive the emergence of the Landcare movement late in the 1980s. For decades, narrow attention towards production had obscured the ecological consequences of industrial farming practices. Government agencies and land managers began to take a wider perspective as they realised the wounding of local ecologies was threatening agricultural productivity. Rather than rejecting productionist agendas, the Landcare movement tended to reinforce dominant and ecologically destructive cultural frameworks. As a group of Australian Bureau of Agricultural and Resource Economics economists explained, the primary role of Landcare was to erase another barrier to the ever-rising productivity of industrial agriculture:

Efforts to achieve gains in productivity are increasingly constrained by the inherent productivity of the natural resources available. Over the past decade, the Landcare movement has been the focus of a nation-wide attack on land resource problems.⁹⁵

Government agencies, farmers, and Landcare groups hoped minor interventions would allow broadacre farming practices to continue relatively unchanged. They planted native trees and shrubs across salty and eroded areas fenced from stock and in bands along paddock edges. The aim was not to relieve rural places of pressure. Rather, scientists and Landcare groups tried to help farmland bear the demands of established high-input, high-output farming systems. People seeking to address the ecological disordering of rural places

⁹⁴ 'Increasing farmer profitability the aim of Patterson Lott Associates', *Southern Weekly Magazine*, 14 April 2003.

⁹⁵ Philip Knopke, Ben Furrage, Peter Walters and Anthony King, 'Agriculture in the Australian Economy', p. 28, in National Farmers' Federation, *Australian Agriculture*, Morescope, Camberwell, 1995, pp. 17-33.

never began to challenge the economic and cultural dynamics responsible. Ignoring the underlying origins of ecological disorder, they provided no safeguards against future destruction. *Productive Use of Salt Affected Land*, a pamphlet published by NSW Agriculture in 1993, did not suggest modifications to farming methods causing dryland salinisation. Only symptoms of disorder needed addressing, the publication made clear:

Reversing the *causes* of dryland salinity by treating the catchment is generally a difficult and slow process. Treating the *symptoms* of dryland salinity is an important part of an overall catchment or farm plan. This involves revegetating saline discharge areas with more productive species.⁹⁶

Perverse efforts to reap profits from ecological wounds reinforce the narrow commercial imperatives underlying disorders like dryland salinisation. The Productive Use and Rehabilitation of Saline Lands (PUR\$L) group of Australian natural resource managers and scientists annually hold a conference to discuss 'a different vision' of salinisation: 'saltland is also potentially useful for profitable industries in agriculture, forestry, horticulture, aquaculture, minerals and energy.'⁹⁷ In 2001, a horticultural products and biotechnology company released 'Saltgrow', a new hybrid strain of eucalyptus. According to the firm, Saltgrow trees thrived in places suffering salinisation. After a few years, plantations lowered watertables and gave farmers a crop of hardwood timber.⁹⁸ In the same year, the New South Wales Department of State and Regional Development launched 'SalinityBiz', an enterprise designed to bolster business activity and primary production in regions where farming practices caused salinisation. Program architects hoped SalinityBiz would help people overcome limits to production and profit imposed by dryland salinity. The 'major challenge' and 'growing burden' of salinity, they declared, also represented 'a tremendous opportunity for people and organisations with the skills and resources to develop

⁹⁶ NSW Agriculture, *Productive Use of Salt Affected Land*, pamphlet, 1993.

⁹⁷ 'Productive Use and Rehabilitation of Saline Lands (PUR\$L)', www.ndsp.gov.au/40_pursl/pursl.html, accessed January 2004.

⁹⁸ Sean Fewster, 'Can a little tree help save the Murray?', *Australian Farm Journal*, July 2002, p. 22; 'Saline Commercial Forestry Research', NSW Country Hour Summary, 6 September 2001, www.abc.net.au/rural/nsw/stories/s359784.htm, accessed May 2003.

and implement solutions.' Salinity could be viewed 'as a business opportunity as well as an environmental scourge'. Efforts to find 'solutions' to the problem of salinity would 'generate jobs, investment, sales and exports.'⁹⁹

Before the intensification of colonisation on the southwest slopes in the second half of the nineteenth century, Wiradjuri people continued tending land to bolster ecological connectivity and heighten natural productivity. Ecological dynamism is a feature of healthy and diverse natural communities. Interactive natural relationships offer land resilience against droughts, storms, frosts, bushfires, and other forceful events. Natural stability and productivity is retained. Extreme demands imposed by global market structures push farmers to maintain ecologically blind, industrial production systems rather than integrate farming methods into local ecologies. Developing ecological farming systems responsive to natural patterns is complex and difficult. Levels of grain production cannot, in the short term, match the output of industrial systems. Ecological integrity and wellbeing, explained Mitta Mitta district farmer Owen Whitaker,

have become irrelevant in the scale of things that you have to achieve, to be able to produce economically, to return the profits. And they've become irrelevant in the world scene of marketing. Because they say: 'Look, if you need to look after your land to that extent, that's fine, if you want to do that. But, the world market's here to say you're not relevant in the scheme of things, in the world market. Because there's producers in other countries that don't really care about that and they'll produce and compete with you on an equal footing on a world scale. Because we've got cheap fossil fuels that can move all this sort of stuff around, and we don't have industrial relations laws in those other countries, so we can exploit our workforce. Or we don't have environmental laws or regulations so we can exploit our environment. And if you want to be a producer on a world scale you're got to swallow that, and compete.'¹⁰⁰

⁹⁹ NSW Government, 'SalinityBiz: solutions that pay', www.salinitybiz.nsw.gov.au/, accessed March 2002.

¹⁰⁰ Owen Whitaker, 18 March 2003.

Today, efforts to make agriculture 'sustainable' do not, unfortunately, reflect a widespread movement towards ecological farming systems. Global economic pressures are intense and relentless, blocking necessary change. In the context of modern farming, the rhetoric of 'sustainability' reaffirms rather than challenges the culture of industrial productionism. According to the *Macquarie Dictionary of New Words*, the term 'sustainable farming' entered Australian English in the 1980s.¹⁰¹ Definitions of 'sustain' in *The Oxford English Dictionary* include to 'keep going, keep up, ... to carry on (a conflict, contest)', to 'maintain the use, exercise, or occupation of', to 'endure without failing or giving way; to bear up against, withstand', and to 'bear, support, withstand (a weight or pressure).' The dictionary defines 'sustainable' as 'Capable of being borne or endured', and 'Capable of being maintained at a certain rate or level.' And 'sustained' is defined as 'Kept up without intermission or flagging; maintained through successive stages or over a long period; kept up or maintained at a uniform (esp. a high) pitch or level.'¹⁰²

Comments made in 2003 by Ian Macdonald, New South Wales Minister for Agriculture and Fisheries, show the relationship between notions of 'sustainability' and the dominant culture of agricultural productionism.¹⁰³ 'Agriculture has never been a more critical sector of this state's and this country's economy', Macdonald declared. The annual value of agricultural production in New South Wales was almost nine billion dollars, nearly one third of the national agricultural output. Such a figure was achieved, the politician explained, through steady productivity growth since the 1970s, a result of better technologies and land use practices: 'Continual improvements in production technology and techniques have allowed more effective use of labour, land, water, and nutrient resources.' Macdonald ignored the array of ecological disorders imposed by the postwar intensification of farming methods in recent decades. Instead, he praised the 'more effective use' of farmland. In the future, according to Macdonald, farmers would have to boost production levels even further to meet the

¹⁰¹ Butler, *The Macquarie Dictionary of New Words*, p. 353.

¹⁰² J A Simpson and E S C Weiner, *The Oxford English Dictionary*, vol. 17, Oxford University Press, 1989, pp. 326-327.

¹⁰³ Ian Macdonald, 'Agriculture on the move', *NSW Agriculture Today*, 28 August 2003.

demands of a growing population. 'Sustainability' of rural land and people depends on productivity growth, on more of the same: 'Only through the continual refinement of existing technologies—and the development of new ones—will NSW agriculture be able to deliver on these needs and, at the same time, create long-term economic and environmental sustainability.'

The logo of the Harden-Murrumburrah Landcare Group is a drawing of a grain-filled head of wheat.¹⁰⁴ In modern 'sustainable farming', profitable and increasingly bounteous production remains the primary goal. 'Natural resource management is an important part of everyday life on most farms', explains the representative body NSW Farmers, 'as landholders work to make their properties more productive, profitable and environmentally sustainable.'¹⁰⁵ In 2000 Warren Truss, Federal Minister for Agriculture, Fisheries and Forestry, addressed the International Landcare Conference in Melbourne. Despite the ecological disorders delivered by export-oriented, productionist agriculture, the primary considerations of modern farming remained production, profit, and the national economy:

Landcare has emerged in Australia over the past 20 years to become part of the mainstream of Australian agriculture. The direct link between long-term sustainability of the resource base and the productivity and profitability of industry is now well established and accepted.

In 1998-99, Australian agricultural production is valued at around \$28.6 billion and contributed \$22 billion in export earnings to the Australian economy.¹⁰⁶

In the early 1980s, the Department of Education exchanged our old, voluminous school bus for a much smaller vehicle. The farmland west of Cootamundra held fewer children. Between 1961 and 2001, the number of Australian farms almost

¹⁰⁴ 'Harden-Murrumburrah Landcare Group', www.anbg.gov.au/greening-grainbelt/hmlg-intro.html, accessed May 2003.

¹⁰⁵ 'Sustaining the Land', www.nswfarmers.org.au/conservation/case_studies, accessed June 2003.

¹⁰⁶ Warren Truss, address to the International Landcare 2000 Conference, 3 March 2000, www.affa.gov.au/ministers/truss/speeches/ilcspeech.html, accessed November 2003.

halved as average farm sizes rose nearly fifty percent.¹⁰⁷ The Australian Bureau of Agricultural and Resource Economics recently told farm business managers they could boost profitability by purchasing or leasing even more land.¹⁰⁸ With official encouragement, rural depopulation continues. As farmers depart and farm acreages expand, the 'eyes-to-acres' ratio falls.¹⁰⁹ Human memory and knowledge of local ecologies, in some cases gathered over generations, vanishes from the land. Global dynamics of trade and economic power force families and individuals from rural places of emotional attachment. Depopulation and rising farm sizes means remaining farm managers are less likely to inherit and develop intimate understandings of rural places. Potential is undermined for responsive relations between people and farmland. In pursuit of profits and production, on expanding acreages, farmers cannot easily sense and meet the varied and shifting needs of local ecologies.

An overemphasis on production, observes farmer Wendell Berry, obscures the natural and cultural foundations of long-term agricultural productivity.¹¹⁰ Obviously, farming must be productive. But production is not, Berry argues, the primary standard by which we should measure and shape agricultural systems. Enduring agricultural productivity depends on ecological and social wellbeing. Land and people must come before economics and production. For rural land to be strong and naturally productive, writes Berry, 'the people who use it must know it well, must be highly motivated to use it well, must know how to use it well, must have time to use it well, and must be able to afford to use it well.' With government support, standards determined not by global economic structures may be set for Australian agriculture. Responsiveness to social and ecological needs can be protected and enabled. Suppose the primary standard of farming became not production and profitability, 'but the health and durability

¹⁰⁷ Australian Bureau of Agricultural and Resource Economics (ABARE), 'Trend toward larger farms likely to continue', media release, 11 July 2002,

www.abare.gov.au/pages/media/2002/11July1%20.htm, accessed November 2003.

¹⁰⁸ ABARE, 'Trend toward larger farms likely to continue'.

¹⁰⁹ Wes Jackson, *Altars of Unhewn Stone*, pp. 15-16.

¹¹⁰ Wendell Berry, *What Are People For?*, North Point Press, San Francisco, 1990, pp. 206-207.

of human and natural communities', Wendell Berry posited.¹¹¹ What outcomes might then unfold for the farmlands and people of Australia?

¹¹¹ Berry, *Life is a Miracle*, p. 134.

Progress

Stories of inevitability

Evelyn Sturt, brother of explorer Charles Sturt, became the first Commissioner of Crown Lands for the Murrumbidgee squatting district in 1837. On the southwest slopes, he encountered vibrant, enchanting places:

The country was at this time most beautiful—miles of it untrodden by stock, and, indeed, unseen by Europeans. Every creek abounded with wild fowl, and the quail sprung from the long kangaroo grass which waved to the very flaps of the saddle.¹

Ecological fragmentation and destruction was 'a necessary change' the former Commissioner felt, a regrettable but inevitable byproduct of progress. 'It has often been a source of regret to me that all the charms attending the traversing of a new country must give way to the march of civilisation', Evelyn Sturt noted. The 'demands of population', he wrote, had destroyed 'the quiet serenity of the Australian bush'. The meeting of human needs does not, in truth, require local extinctions and ecological disorder. Like Evelyn Sturt, Mary Gilmore remembered swamps and grassy woodlands on the western slopes as lively. Wi-radjuri sanctuary law, burning methods, and other practices ensured diversity and abundance:

¹ Evelyn Sturt, letter to Charles La Trobe, 20 October 1853, in Thomas Francis Bride (ed.), *Letters from Victorian Pioneers*, Lloyd O'Neil Pty Ltd, South Yarra, 1983, p. 364.

The richness of unbroken centuries of an untilled land sapped through everything. Life teemed in the water, life teemed on the earth, life teemed in the air. Life fed upon life in balance; bred, multiplied, and knew no famine.²

As agricultural colonisation displaced Wiradjuri people and the livestock of squatters, the life and vitality of local ecologies ebbed:

A few years later when I asked my father why we could not get fish as formerly he said, "When the blacks went the fish went:" meaning that the habit of preserving the wild was destitute in the ordinary white settler. Yet at that time the white population on the rivers was only a fraction of what the black had been.³

As Mary Gilmore and her father understood, humans are not innately and unavoidably destructive. Cultural frameworks shape actions. Different perceptions and beliefs foster different behaviours and different ecological realities. A distinct and influential cultural framework imported from western Europe and reinforced by colonial dynamics of power generated the narrative of progress and inevitable ecological destruction told by Evelyn Sturt. Progressive stories justified Aboriginal dispossession and the fragmentation of living systems. On the southwest slopes, the honouring and naturalisation of relentless change enabled the denial of needs and rights of Wiradjuri people, other species, and local ecologies. Colonial power and distant markets demanded faith in stories of progress.

Powerful narratives of inevitable change helped ease colonial anxieties evoked by contact with natural forces. In 1909, a journalist visiting Temora described 'the fears and doubts of early settlers that wheat-growing would prove unstable'.⁴ The reporter assured readers such uncertainty was groundless. Farmers had survived the great drought at the end of the nineteenth century, and wheat acreages continued to grow each year. Might a longer and deeper drought de-

² Gilmore, *Old Days: Old Ways*, p. 146.

³ Gilmore, *Old Days: Old Ways*, pp. 117-118.



Kangaroo grass, Wallendbeen cemetery, December 2003.

scend? After only a few decades of settlement and weather observation, colonists could not be sure. Might bushfires, gullies, or windstorms undermine the colonial project of agricultural settlement? Could the western slopes of New South Wales really offer secure, productive foundations for the emerging nation of Australia? Or did the land itself call for other imperatives, other stories, other styles of engagement? Grey stands of ringbarked eucalypts reminded the colonists of the distinct nature of the region. Restless and active, settlers managed to evade persistent questions and shadowy doubts as they drained swampland, buried grasslands with ploughs, and established permanent settlements.

Closer settlement laws and the arrival of the railway fuelled agricultural development across the Wallendbeen district in the final decades of the nineteenth century. Selectors carved small farms from the grazing paddocks of Wallendbeen station, a property managed by the Mackay family since the early 1840s. When Alexander Mackay died in 1890, the *Cootamundra Herald* imagined the pastoralist had felt keenly the fragmentation of 'his magnificent estate'. More than sixty thousand acres in 1848, the area of the squatting run had dwindled sixfold over recent decades.⁵ Despite the loss of much grazing land to farming families, the newspaper obituarist 'never heard of any bitterness or bickering between the selectors and the pioneer of Wallendbeen.'⁶ Alexander Mackay's son Kenneth accepted the processes of pastoral decline and agricultural development in his poem 'The Passing of the Shepherd Kings', published in 1908.⁷ For the progressive story of nationhood to unfold, the heroic first chapter of pioneering had to close:

Vanguard forever doomed to die!
The hour draws near,
When rope and shear
Will, frayed and rotting lie;

⁴ 'Through Progressive Districts—Cootamundra to Barellan', *Town and Country Journal*, 30 June 1909.

⁵ Colonial Secretary's Office, 'Claims to Leases of Crown Land beyond the Settled Districts. Lachlan District', *Supplement to the New South Wales Government Gazette*, Wednesday, 27 September 1848, p. 1315.

⁶ 'Death of Mr. Alexander Mackay', *Cootamundra Herald*, 8 February 1890.

When camp and yard will pass away,
And bit and steel will useless rust
In empty stalls,
Where silence calls
To silence, 'mid dishonoured dust.

Brave squatters like his father, Alexander Mackay, had laid a firm foundation for the Australian nation and its people:

With iron will and steadfast face
You led the way,
In that dim day
Which saw the dawning of our race.

Like other legends of Australian pioneering, 'The Passing of the Shepherd Kings' honoured those men and women who endured much hardship as they strove to secure land for settlement and production.⁸ Squatters battled the hostile forces of nature, the legend went, and bequeathed the spoils to many:

Empires have cradled in thy tents;
And millions hold, because of you,
The lands you won,
From snow and sun,
When sea and shore alike were new.

Did Kenneth Mackay recall stories told by elderly men of brutal local encounters with Wiradjuri when he wrote of manly pioneers wetting soil with blood?

No foot of our Australian soil,
But you have wet
With blood or sweat,
And sanctified with manly toil.

⁷ Kenneth Mackay, *Songs of a Sunlit Land*, Angus and Robertson, Sydney, 1908, pp. 14-16.

⁸ John Hirst, 'The Pioneer Legend', *Historical Studies*, vol. 8, October 1978.

The squatting runs were lost for a noble cause, Mackay felt. Today, government policy and economic structures encourage farm expansion and rural depopulation.⁹ A century ago, Kenneth Mackay and many other Australians valued the presence of humans in agricultural regions. Crowded city streets, they believed, undermined the moral fibre of the emerging nation. New farming communities promised social vigour and stability:

To-day your hoof-trod lands we need,
So all the past
Must be recast,
That men may garner strength to breed
A sturdier race than fetid spawn
In narrow streets and filthy hives,
Where crime takes shape,
And passions rape
The Godhood out of human lives.

As the inevitable came to pass and closer settlement fragmented wide pastoral runs, a wistful Mackay declared he would not forget the heroic pioneers who first secured control over the land:

Full soon this fair Arcadian dream
Of primal peace
Alas, must cease!
For, close at hand, strange watch fires gleam,
And keen eyes mark our empty plains.

So men must come, and sheep must go,
If we would hold
This land of gold
Our fathers won us long ago.

But when one fat with wine and corn,
Who has forgot,

⁹ See 'Demanding production', Chapter Two.

Or knoweth not
The tale of how his race was born,
(In love with his own pampered self),
The song of farm and orchard sings—
Whate'er his boast,
Be mine to toast
The memory of the Shepherd Kings.

An epic narrative of nation building and inevitable change drove the fragmentation of Wallendbeen and other pastoral stations. 'Where today is a vista of ploughed earth or flourishing crops and all the other visible signs of a farming community, not so very long ago stretched broad sheep pastures cleared, fenced, watered and hewn from the rough', wrote the editor of *The Pastoral Homes of Australia* in 1929. The relentless march of time would itself fragment and destroy the remaining grand estates of pastoral pioneers:

Inevitably, in the natural order of things, will their work of to-day become part and parcel of the history of Australian development, for these homes, or at least the majority of them, will sooner or later no longer exist as we know them. The tide of closer settlement, a tide that will not recede, is advancing and submerging them utterly, or leaving here and there surrounded by its flood an isolated island, the homestead block of some famous old station.¹⁰

In *The New South Wales Wheat Frontier 1851 to 1911*, human geographer Michael Robinson presents a series of maps charting the spread of farmland across the western slopes and plains.¹¹ Black dots, each representing one hundred acres of wheat, coalesce near railway lines. Three maps—1892, 1902, and 1910—show dark impressions gathering into a dense expanse across the southwest slopes. In the late nineteenth and early twentieth centuries, agricultural development and the fragmentation of pastoral leaseholds drove remnant Wiradjuri groups from station campsites. Native foods vanished as farmland spread. Managers of dwindling pastoral stations no longer needed large workforces. One account

¹⁰ The Pastoral Review Pty. Ltd., *The Pastoral Homes of Australia*, Sydney, 1929.

records the last Aborigines of Ironbong station, near Bethungra, leaving in about 1910.¹² Displaced families and individuals gathered at town fringes. The close proximity of hungry and dishevelled Wiradjuri troubled townspeople. In 1882, the *Cootamundra Herald* anguished over the 'wretchedness and brutalising' of Aborigines in an 'unprotected camp' outside town. How could settlers, the newspaper asked, 'who have prospered on the ruin of our country's own race, whom we have thoughtlessly disregarded, outraged, and ill-treated, look on such a scene without a reproachful conscience?'¹³

Categorisations of Aborigines as primitive and unworthy dispelled settler shame and cast colonial processes of dispossession as reasonable. Aborigines, colonists told themselves, deserved displacement. In June 1890, the *Cootamundra Herald* published an article by Carl Lumholtz, author of *Among Cannibals*, an account of his Australian travels. 'The aborigines of Australia are the lowest and most degraded human beings to be found on the face of the earth', Lumholtz claimed. Aborigines had no 'higher ideas of religion'. They used crude tools of stone, timber, and bone, and led lives 'of idleness, of robbery, fight, and cannibalism.'¹⁴ Days later, the paper printed a list of areas in the Cootamundra and Gundagai districts opened for selection by the Department of Lands. One available block of land consisted 'of moderately timbered box forest, red clay soil (upon which the timber has been killed by ringbarking) and may be classed as agricultural land.'¹⁵ Did settlers recall falsehoods told by Lumholtz as they rode past the Cootamundra fringe camp to inspect land for selection?

Belief in the inevitability of change helped justify the actions of settlers. Time itself became a driving force. In 1894, a reporter visiting Cootamundra described a profound transformation.¹⁶ Thirty years previously, the swampy place

¹¹ Michael E Robinson, *The New South Wales Wheat Frontier 1851 to 1911*, Research School of Pacific Studies, Canberra, 1976, pp. 203-203.

¹² Peter Read, 'Fathers and sons: a study of five men of 1900', *Aboriginal History*, vol. 4, 1980, p. 99.

¹³ 'The Warangesda Mission', *Cootamundra Herald*, 4 February 1882.

¹⁴ 'How the cannibals presented me with a wife', *Cootamundra Herald*, 21 June 1890.

¹⁵ 'Land for selection', *Cootamundra Herald*, 25 June 1890.

¹⁶ 'Cootamundra: A Great Record of Progress', *Cootamundra Herald*, 25 January 1896; and see 'Unremembered voices', Chapter Five.

reverberated with calls of turtles, insects, frogs, and wild ducks. The 'evolution of time' had brought extraordinary changes, the reporter wrote. No longer did people hear a cacophony of swampland species. As decades passed, the 'splendid town' of Cootamundra had 'sprung up'. The town site, the journalist mentioned, was formerly 'a lake or swamp'. The watery place was 'drained by the growth of the town'. Settlers held little agency in the newspaper story of dramatic ecological change. Almost naturally, as time passed, the town grew and species vanished. Rather than an inevitable unfolding of history, settlers deliberately made social and ecological changes. Rumours swept Temora in 1890 that Reverend John Gribble planned to establish an Aboriginal reservation in the district. The newly established Progress Committee of Temora agreed to 'take the matter up and protest against such an infliction on their fair and rising district.'¹⁷ An inescapable process of change did not deliver the social and ecological realities known today on the southwest slopes. As the formation and deliberations of the Temora Progress Committee indicate, settlers actively constructed notions of progress to enable agricultural and commercial gain.

In the first decades of town development on the western slopes, civic leaders strove to construct streetscapes signifying progress towards European ideals of civilisation and comfort. It appears colonists were anxious to convince themselves and visitors that imported systems of farming and British patterns of settlement would prove stable and prosperous. 'Temora looked as if it might be much older than it is', observed a visiting journalist in 1909. The reporter noted 'neat cottages and pretty villas, embowered in many instances in a profusion of creepers and shrubs, and walking through the main thoroughfares of the town, saw fine substantial buildings lining the streets on either sides'. There were 'beautiful churches, schools, and other institutions, with the undulating country all round it cleared for some distance, and studded with comfortable residences'.¹⁸ In 1900, a reporter found Cootamundra 'one of the cleanest, best laid out, and well-regulated towns in New South Wales.'¹⁹ The mayor and aldermen had achieved 'remarkable work' developing the settlement. 'Its well-made, rec-

¹⁷ 'Progress Committee', *Cootamundra Herald*, 8 March 1890.

¹⁸ *Town and Country Journal*, 30 June 1909.

tangular streets, planted with shade trees, its public reserves, its abundant water supply, its sanitary and lighting systems, its many valuable buildings, pretty churches, hospital, municipal buildings, banks, school of arts, free public library, all tend to make a healthy and progressive town', the journalist wrote. English traveller Michael Davitt visited southeast Australia in 1898. In the coastal cities he encountered 'wealth, progress, and enlightenment', then journeyed inland through rural areas 'which has made them what they are.' Davitt thought Wagga 'one of the prettiest little inland towns in the colony'.

The streets of the town are wide and are planted with the pepper tree on each side. The houses are well built, and there are many handsome public buildings and churches. The countryside is dotted with choice residences and gardens, while vineyards and orchards are plentiful along the river banks.²⁰

In 1938, the people of Wagga joined national celebrations marking one hundred and fifty years of European settlement in Australia. The local council and chamber of commerce issued a commemorative booklet, *Wagga Wagga: A Far Cry*. The front cover shows an Aboriginal man and stylised modern buildings.²¹ According to the Wagga artist responsible, the design represented 'primitive man and modern civilisation.' The regional centre and Murrumbidgee River district had moved far down the linear pathway of progress. 'Could we but look with primitive wonder at modern Wagga and her beautiful countryside', the artist wrote. Settler anxiety remained in 1938, it seems, over the validity and permanence of European colonisation on the southwest slopes. The sesquicentenary gave opportunities to construct and maintain strident stories of local and national progress. Perhaps an effusive advertisement published inside the Wagga souvenir booklet helped allay concerns:

One Hundred & Fifty Years!!! Years of Glorious Endeavour & Achievement!
Years that have seen our Vast, Beautiful Continent grow from a Primitive Wil-

¹⁹ 'Cootamundra. A Quarter-Century's Growth', *Sydney Mail*, 22 December 1900.

²⁰ Michael Davitt, *Life and Progress in Australasia*, Methuen, London, 1898, p. 175.

²¹ *Wagga Wagga: A Far Cry*, Municipality of Wagga Wagga and Wagga Chamber of Commerce, 1938.

derness into a Land of Plenty—a Land of Progress! A Glorious Outpost of a Glorious Empire! Gold! Wheat! Wool! Factories! Industries!

Agricultural science and industrial technologies transformed the western slopes in the twentieth century. Town development symbolised regional progress, a break from the past. In the 1960s and 1970s, growing public interest in Australian and local history brought new ways of seeing places and old buildings. Identification of 'heritage' signified a separation between the past and the present.²² The short history of European settlement in Australia made it difficult to imagine the past as past. As historian Tom Griffiths observes, historical events remained close, 'often astonishingly so', to the lives and times of settler Australians.²³ Perceptions of historical divorce served those who looked to the future. 1961 marked a century since the New South Wales Government decided to establish the settlement of Cootamundra. An official souvenir of the centenary describes great strides taken by the town and district.²⁴ 'A survey of the progress of agriculture in the Cootamundra district would cover such a wide field that in an article of this nature only significant phases can be mentioned', one contributor explained. Inside the souvenir publication, a reproduction of an old photograph captioned 'Parker Street in 1870' shows eucalypts and a handful of small buildings beside a dusty road. A second image sits below: '100 years of progress. A night view of Parker Street in 1961', the caption reads. Double-storied shopfronts and hotels line the main street, stripped of deep verandahs and bathed in electric light. In an introduction to the souvenir, Mayor Twomey honoured the pioneers of Cootamundra. Locals had an 'inescapable duty and responsibility, to carry on the work of progress, begun 100 years ago.'

Eight years later, almost two thousand Cootamundra town and district residents signed a petition opposing plans of the Cootamundra Municipal Council

²² Tom Griffiths, *Beechworth: an Australian Country Town and its Past*, Greenhouse Publications, Richmond, 1987, p. 1.

²³ Griffiths, *Beechworth: an Australian Country Town and its Past*, p. 1.

²⁴ B Boddington (ed.), *Official Souvenir of Cootamundra Centenary 1861-1961*, pamphlet, Cootamundra, 1961.

to demolish the Town Hall office building and tower.²⁵ The people of Cootamundra had 'a high regard and much affection' for the tall and decorative Victorian structure, the petition organisers argued. The Municipal Council had 'not fully appreciated the historical and architectural value of the building'. A new administrative block and improvements to the dilapidated hall and kitchen would serve future generations admirably, aldermen explained in reply. 'We're looking 30 years ahead', Alderman French told the *Cootamundra Herald*.²⁶ When the replacement complex opened in 1971, dignitaries spoke of the inevitability and promises of progress. 'The completion of this major project is not only another step forward for Cootamundra, but we should also recognise it as symbolic of our progress', declared Alderman Richards, Mayor of Cootamundra.²⁷ At the official opening, state politician John Waddy acknowledged those who tried to save the original building from demolition. Unfortunately, the relentless push of linear time made its destruction inevitable: 'There is no one among us today who doesn't feel sad to see historical old structures removed when they are in the path of progress.'²⁸

Like the removal of old verandahs and iron lacework from main street hotels and shops, the construction of a new municipal office building represented movement towards the future. 'A town's history is not only served by preserving its buildings of yesterday', John Waddy told the crowd at the opening, 'it is also served by raising new edifices today that will stand for the benefit of the generations of tomorrow and the day after.'²⁹ In the final decades of the twentieth century, the identification and preservation of old buildings as 'heritage' helped maintain the forceful idea of progress. Clear demarcation between past and present enables economic activity and the dramatic transformation of places. Linear time is imagined as a simple imperative divorced from contingencies of place and history. Old buildings and other items classed as settler

²⁵ A Petition to the Honourable P. H. Morton, M.L.A., Minister for Local Government and Minister for Highways on the Town Hall, Cootamundra, 1969, held by the Cootamundra public library.

²⁶ 'Decision to demolish hall facade', *Cootamundra Herald*, 26 March 1969.

²⁷ "'Taking us into 21st century,'" says Mayor', *Cootamundra Herald*, 11 June 1971.

²⁸ 'New buildings also serve a town's history', *Cootamundra Herald*, 11 June 1971.

²⁹ *Cootamundra Herald*, 11 June 1971.

heritage guide movement towards a bright future. The Cootamundra Shire Council website associates business activity with heritage:

Cootamundra and district have always produced good beef, lamb, wool and rich crops of grain. A recent study has identified that Cootamundra has exceptional natural resources for Agribusiness Development.

Cootamundra has always maintained an affinity with days gone by. Many of the older buildings remain, and are being sensitively restored, while in Cootamundra's Cooper St a whole avenue of century-old elm trees have been heritage listed.³⁰

In a promotional booklet published in 2000, Temora Shire Council also binds prospective commercial development to historical narratives of linear, progressive time.³¹ Temora has many heritage buildings, the booklet explains. 'Edwardian and Federation periods are well represented throughout the town'. A photograph of a decorative old church overlaps another showing a wide paddock of flowering canola, a brilliant yellow display of successful modern farming. According to social theorist Dipesh Chakrabarty, efforts to objectify the past reflect a desire to be free of the past.³² Freedom from past events and unfortunate outcomes of historical processes enables new futures to emerge. The publication issued by the Temora Shire Council evokes the imaginary power of a separated past to achieve productive futures. Distinctions between past and present are considered intertwined with economic activity and agricultural development:

The district is an agricultural showcase with grain and livestock dominating the landscape to the far horizons. Grain terminals bursting with activity at each harvest point to a rosy future. The diversity and strength of agriculture is the foundation of the local economy. The rural fabric of Temora makes it a good place to get "grounded", to go back to our origins, to get back to basics and a simpler way of life away from the hustle and bustle.

³⁰ Cootamundra Shire Council, 'General Information', http://cootamundra.local-e.nsw.gov.au/about/01/1056326289_19124.html, accessed August 2003.

³¹ *Temora: South West NSW*, Temora Shire Council, 2000.

Nostalgic constructions of the past allow evasion of ethical responsibilities to address immediate needs rising from histories of ecological disorder and social injustice. The past is imagined as a comfortable domain, separate from the present but clearly visible. 'The Riverina I live in has charm because it hasn't lost touch with its past', remarked a Riverina resident in a pamphlet promoting the region.³³ History is encountered inside regional museums and across painted facades of heritage buildings, not in the everyday patterns of life. Dominant historical narratives obscure connections between brutal events of the past and realities of the present. Past events are seen to belong in the past, imposing no limits on human activities today. In his 1968 play *The Cherry Pickers*, Wiradjuri writer and visual artist Kevin Gilbert challenged those historical narratives blind to past injustices and the present-day ethical responsibilities of settlers. Bungaree, a character representing a famous Aborigine of early Sydney, describes 'a web of lies to strangle human right'.³⁴ The 'burning native souls' of his people are 'aglow aglow demanding justice done'. Gilbert's character implores audiences to reject nostalgic, falsified stories of Australian settlement:

Look back and look beyond to history
to know your country's birth, to know the truth
or is your love so base—built on deceit—
Then lo! The monstrous march of burning feet...³⁵

On the southwest slopes, old buildings freshly painted in heritage colour schemes today serve similar functions to the 'wilderness' imagined by earlier generations of progressively minded colonists. In 1930, Temora residents celebrated fifty years of town settlement. An author of a souvenir publication interviewed William Marshall, one of the first settlers to arrive in the Temora district. 'In the early fifties the solitudes of the big stretch of country lying between

³² Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference*, Princeton University Press, Princeton, 2000, p. 244.

³³ *Riverina... real experiences... real people... naturally*, pamphlet, Riverina Regional Development Board, c. 2000.

³⁴ Kevin Gilbert, *The Cherry Pickers*, Burrumbinga Books, Canberra, 1988, p. 4.

³⁵ Gilbert, *The Cherry Pickers*, p. 5.

Cootamundra and Wyalong were almost unbroken', the elderly man remembered. A dark and lonely silence prevailed:

No sound was heard except the "neighing of the wild horses and the howl of the dingo." It was in many respects, said Mr. Marshall, a wilderness. But the country appeared to be suitable for settlement, and it was being gradually taken up.³⁶

Another long-time Temora resident spoke of local Wiradjuri spearing cattle and killing sheep, 'but as civilisation advanced the complaints about their conduct became less and less.' Wild scrub and Wiradjuri people vanished as brave pioneers responded to the imperatives of progress:

It mattered not that the landscape was wreathed in almost impenetrable forest and held by savage hordes, the pioneers' watchword was "Advance," and the crack of the stockwhip was followed by the ringing sound of the bushman's axe. It was but another exemplification of the dictum that the fittest survive. The unenterprising, non-progressive native was dispossessed and driven back and the zone of civilisation was gradually extended.³⁷

The souvenir writings of 1930 were reprinted alongside fresh material in a commemorative edition of the *Temora Independent* published in 1980 to mark the centenary of Temora.³⁸ Like the earlier publication, the centennial edition presented bright, progressive narratives of local history, honouring those men 'who made the great heart' of the Temora district 'yield to their labours'. Late in the twentieth century, people remained faithful to the ideals of progress. 'May the progress and achievements of our first 100 years be but a starting point in a never-ending march to greater achievements', the centenary supplement declared.

³⁶ *Temora's Jubilee Souvenir*, J A Bradley, Temora, 1931.

³⁷ *Temora's Jubilee Souvenir*.

³⁸ *Temora Independent Centenary Celebrations' Supplement*, Temora, 1980.

In 2002, I met Ron Maslin at the Temora Rural Museum. Ron helped found the Museum in the early 1970s.³⁹ Inside an enormous iron shed we examined antique grain picklers, a hay rake, horse drawn harvesters, and other old agricultural machines. Ron carried a booklet containing the dates each item was invented. He mentioned the Australian inventors of revolutionary farming technologies—Richard Bowyer Smith, HV McKay, Headlie Shipard Taylor, and others. I asked Ron to explain what role the Temora Rural Museum played. The Museum preserved outdated machinery and artefacts, he replied, to convey a story about ‘the progression’ of farming technology from the early days to the present. Curators worked ‘to preserve the history’ of rural life.

The last piece of machinery we looked at was a stump-jump plough made in Temora in about 1900. Richard Bowyer Smith, a South Australian farmer, invented the stump-jump plough in 1876, Ron explained. Farmers found imported ploughs unsuited to Australian conditions. Farmland cleared hastily of eucalypts retained stumps and roots that snagged the regular, fixed-blade style of plough. Buried stones caused problems too. Drivers and horses were often injured, and ploughs damaged. Levers on the implement invented by Smith allowed plough blades to ride over buried roots and stones. ‘The only time you might get trouble’, Ron said, ‘is if they get under a stump where there’s a big root, and they jam.’

I picked up a pamphlet about the Temora Rural Museum as I left the entry building. ‘Preserving the Past for Tomorrow’s Generation!’ the pamphlet declares beneath a photograph of a restored steam engine. On the main street, a newsposter in a mesh frame carried the current *Temora Independent* headline: ‘Commercial release of GM canola proposed’. I bought a copy. Two transnational corporations had applied to the Federal Government for approval to sell genetically modified canola seed to Australian farmers.⁴⁰ Another step along the inescapable pathway of progress? Yet again, constructed notions of linear time

³⁹ Ron Maslin, conversation at Temora Rural Museum, 11 October 2002.

⁴⁰ ‘Commercial release of GM canola proposed’, *Temora Independent*, 11 October 2002.

and modern imperatives disguised and naturalised choices made by powerful individuals and groups to advance their own interests.

'You can't go back'

Colin Donald, Professor of Agriculture at the University of Adelaide, published 'The Progress of Australian Agriculture and the Role of Pastures in Environmental Change' in 1967.⁴¹ In the academic paper, the renowned agricultural scientist presented a triumphal and optimistic narrative of scientific progress. Agricultural scientists, Donald noted, first made a substantial contribution to Australian farming late in the nineteenth century. Cropping had depleted soils of essential nutrients like phosphorus and nitrogen, and wheat yields were falling. Applications of superphosphate fertiliser, scientists found, reversed the decline. Other problems appeared in the first half of the twentieth century. Soil structures deteriorated as farmers repeatedly cultivated paddocks to control weeds and conserve moisture. Gullies fragmented hillsides and windstorms carried topsoil from paddocks. Agricultural and soil scientists, Donald observed, solved the problem of erosion too. In the 1950s and in later decades, leguminous pastures and chemical farming systems restored the fertility, organic content, and erosion resistance of soils, and boosted agricultural production. The paper contained a number of graphs. Diagonal lines charted steady rises since World War Two in sheep numbers, wool production, average fleece weight, and the total area sown to 'improved' pastures.

The linear, progressive narrative articulated by Colin Donald continues to drive the work of agricultural scientists. At the start of the twenty-first century, scientists hope to solve escalating problems of soil acidification and salinisation, the latest in a line of challenges facing Australian agricultural production. Abstract

⁴¹ Colin M Donald, 'The Progress of Australian Agriculture and the Role of Pastures in Environmental Change', *Australian Journal of Science*, vol. 27, no. 7, January 1965.



Newsposter outside the *Temora Independent*, Hoskins Street, Temora, 11 October 2002.

notions of linear time and industrial space obscure the dynamic nature of rural places, enabling subjugation and intense agricultural activity. When the needs of local ecologies are denied to enable movement towards 'the future', unexpected obstacles inevitably arise. Weeds, erosion, soil acidification, dryland salinisation, and other problems of Australian agriculture are products of actions driven by linear, progressive narratives.

Calls for attention towards the ecological disordering of farmland disturb the dominant narrative of progress informing agricultural science and industrial, export-oriented agriculture. Representatives of modern farming attempt to defend and reinforce linear historical perspectives by accusing critics of wishing to erase all traces of colonisation. In October 2002, *The Land* newspaper attacked those 'green groups and environmentalists who think the only way forward is to go backward'.⁴² Agriculture had progressed far along the development path, the newspaper insisted. 'Trying to back pedal to 1789 isn't an option.'⁴³ Likewise, agricultural scientist David Smith writes of 'those people who long to 'go back', to recreate the past.'⁴⁴ Such aims can never be realised, Smith argues. Rather than 'fruitlessly attempting to retain what is, or fruitlessly working towards what is believed to have been', people should instead focus on the great responsibility of 'future-making'.⁴⁵ Directing attention towards the future, and devaluing 'what is'—the particular natures of rural places—serves modern, commercial interests. David Smith imagines a linear concept of time abstracted from the complex and dynamic nature of places. Such a notion builds perceptions of malleable space, a 'natural resource' available for industrial agriculture and future commercial activity. Throughout the history of Australian colonisation, linear concepts of time and the imaginative replacement of lively places with malleable spaces enabled settlers to harness land in the interests of empire, nation, and the global economy.

⁴² 'Non-start to water debate', *The Land*, 31 October 2002.

⁴³ *The Land*, 31 October 2002.

⁴⁴ Smith, *Natural Gain in the Grazing Lands of Southern Australia*, p. 11.

⁴⁵ Smith, *Natural Gain in the Grazing Lands of Southern Australia*, p. 11.

In *The Cherry Pickers*, Kevin Gilbert offers an understanding of time and land alternative to the progressive, linear concepts dominating settler Australian culture and modern farming. Each year as summer begins, Wiradjuri join other itinerant workers in the Young district to harvest cherries ripening on hillsides. In the 1950s, families came to the Young cherry harvest from Brungle, Cowra, and Condobolin, then travelled to Griffith to harvest apricots.⁴⁶ The work was hard and poorly paid. *The Cherry Pickers* explores issues of culture, history, and justice as a group of Aborigines participates in the annual cherry harvest. Towards the end of the play, Tommlo, a male character in his thirties, argues about notions of progress and Aboriginal identity with his wife Zeena. Tommlo plans to reconstruct and perform a traditional ceremony. Zeena opposes the idea. Tommlo decorates his body under an enormous old cherry tree. Summer-time, the weather is especially dry and hot. Wind carries dust across the stage. A troubling sense of disorder and instability is conveyed. Zeena thinks it particularly absurd that the ceremony will take place beneath the elderly cherry tree: 'Doesn't this prove that *some* advance has been made because 'cherry tree' means money—and food?'⁴⁷ Aborigines cannot embrace 'a stone-age identity in a nuclear age', she insists. 'We must advance, must mature and must never revert back', Zeena declares, 'for life is a constant process of growth.' But Tommlo holds a different, less linear concept of time. He imagines time bound to place and natural cycles, not abstracted from land. Tommlo realises he 'was lost' before, when he 'looked at life, the world, the whiteman's way'. He has rejected abstract concepts of linear time and delights in a personal identity embedded within a dynamic web of ecological relations:

I ain't lost anymore. I am a *nothing*. The trees, the grass, the river, the earth is life, is *everything*. I am *nothing*, a *nothing*. Now that tree is *me*. It is all of me. I am that tree. I am nothing, yet I am somethin' because the earth is me. These rocks are me and I am the movin' soul of them all. See, I looked at the tree and said that is a tree. I kept it all separate and alien, but now, like the old days, I am a nothing but that *tree* is me and I am a something and when I die I will flow into

⁴⁶ Peter Read, *A History of the Wiradjuri People of New South Wales 1883-1969*, PhD thesis, Australian National University, 1983, pp. 231-233.

⁴⁷ Gilbert, *The Cherry Pickers*, p. 60.

the creative essence that made *me*, the tree and all created life, for we are all inseparable.⁴⁸

Tommlo convinces Zeena to join the ceremony and dance. Later, characters notice changes induced by the performance. Bubba, an elderly woman, discovers a renewed feeling of place, of land in lively motion. She is shocked to see ecological sickness for the first time:

It's like as if the Old Days have come back again. Everythin' is movin'. Even the ground is sort of livin' again—or is it—is it dyin'???

Oral, indigenous peoples, philosopher David Abram observes, do not share the western 'distinction between a linear, progressive time and a homogenous featureless space'.⁵⁰ Instead of abstract concepts, time blends with the physicality of places, bringing into motion rich and dynamic terrains. Time is not divorced and linear, but embedded and active. Land is shifting, vital. In *The Cherry Pickers*, Bubba begins to sense the wounds of local nature when she embraces again a Wiradjuri framework of perception and understanding. 'Only when space and time are reconciled into a single, unified field of phenomena does the encompassing earth become evident, once again, in all its power and depth', Abram writes. Rejection of an imaginary western division between time and space enable both Bubba and Tommlo to sense the lively motion of trees, rocks, and earth, the dynamic patterns of place.

Efforts to modify destructive practices are often informed by the same progressive notions underlying ecological disorder. Moving towards idealised future goals like 'sustainability' tends to obscure the immediate needs of wounded places. At Gundibindyal, east of Temora, the Grain Research and Development Corporation and other agribusiness organisations trial new farming methods and crop varieties. 'AUSTRALIA'S GROWING FUTURE, HIGH PERFORM-

⁴⁸ Gilbert, *The Cherry Pickers*, p. 65.

⁴⁹ Gilbert, *The Cherry Pickers*, p. 68.

⁵⁰ David Abram, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*, Vintage, New York, 1997, pp. 216-217.

ANCE CROPS—SUSTAINABLE FARMING', a sign reads beside the road. Travellers passing the Gundibindyal site may hope, the sign suggests, that farmland will some day be able to endure the intense demands of industry and global commerce. There is no need for radical or immediate change, it is implied, nor should we ask if too much is being demanded of Australian farmland. 'By projecting the solution somewhere outside the perceivable present', writes David Abram, every utopian vision of the future dangerously 'invites our attention away from the sensuous surroundings, induces us to dull our senses, yet again, on behalf of a mental ideal.'⁵¹ An embedded concept of time grants motion and dynamism to rural terrain. Possibilities appear for immediate awareness and actions fostering ecological regeneration. Lively places become visible where once only malleable spaces extended. Natural forces and the expressions of other species present in farmland may arise. Dynamism and wounds are noticed. Dialogue and healing may begin.

Returning to Cootamundra

In 1922, a photographer captured a view north from Billygoat Hill, a stony rise on the southern edge of Cootamundra.⁵² The growing town extends across the top of the image, beneath a curving horizon of hills studded with trees. A church steeple is visible amid houses and public buildings. Granite outcrops protrude from the grassy slope where the photographer stood. A line of slab fence posts leads down Billygoat Hill towards swampland. Pools of water reflect mature eucalypts. The swamp surface is uneven and textured. Dark clumps, perhaps shrubs, emerge from the grassy expanse. Gazing at the image, I imagined frogs calling and a yellow-billed spoonbill (*murrugaya*, *Platalea flavipes*) wading in swampland below.

⁵¹ Abram, *The Spell of the Sensuous*, p. 272.

⁵² 'Cootamundra, NSW, 1922', National Library of Australia, pictures collection.



Road sign, Gundibindyal crop trial site, October 2003.

'Aborigines never lived here, away from the rivers', some people tell me. 'Sure there are stone tools in the paddock', they might say, 'but the people who made and used them were just passing through, journeying between the Murrumbidgee and the Lachlan or eastward to the coast.' The stereotype, as anthropologist Hugh Brody observes, is a simple and misguided binary of settled colonists and nomadic, wandering tribes.⁵³ The notion is useful, granting validity to colonial processes of dispossession by denying Aboriginal connections to particular places. Denial of the humanity and dignity of Aborigines also enabled colonisation. Settlers imagined themselves 'civilised' and 'modern'. They classed Wiradjuri people as 'savage' and 'primitive', as the black and homogeneous 'Other' to European whiteness, soon to vanish as agricultural development progressed. Such denials and representations allowed colonial activities to proceed unhindered by moral constraints. Cootamundra residents called the swampy area photographed in 1922 from Billygoat Hill 'The Flat' and 'Frogs' Hollow'.⁵⁴ Within living memory, Gudhamangdhuray clanspeople had tended the watery place as a freshwater turtle sanctuary. Growing up in the district in the 1970s and 1980s, nobody I encountered said much about the origins of the placename 'Cootamundra'. Silences and processes of forgetting obscured rich meanings and contextual details.⁵⁵

Today, brick veneer homes and tidy suburban gardens cover the northern slope of Billygoat Hill. One summer afternoon I walked from the top of Poole Street over the western side of the granite rise and down towards Cootamundry Creek. A tangle of kangaroo and wallaby grass, red gum saplings, native flax (**nidbul**, *Dianella* spp.), hopbushes, and St John's wort cloaks the hillside behind the golf course. Hurleyville homestead, a redbrick house built by the Hurley family, squatters of Cootamundra station, stands to the east, on the southern slope of Billygoat Hill. The presence of a freshwater spring in the bed of Cootamundry Creek, an underground source never known to run dry, perhaps

⁵³ Hugh Brody, *The Other Side of Eden: Hunter-Gatherers, Farmers and the Shaping of the World*, Faber and Faber, London, 2001, p. 7.

⁵⁴ 'Editorial—Southee Subdivision', *Cootamundra Herald*, 11 March 1970.

⁵⁵ See Introduction.

led John Hurley to build the headquarters of Cootamundra station here.⁵⁶ Gudhamangdhuray people living in a station camp near the homestead complex probably considered the spring of much significance. Settlers called the watery place 'Hurley's Springs'.

As Cootamundra grew alongside the Great Southern Railway in the late 1870s, town residents relied on the polluted supply of a small reservoir on Muttama Creek.⁵⁷ In 1881, the *Cootamundra Herald* announced an 'Important Discovery'.⁵⁸ A government engineer had sunk a well at Hurley's Springs and 'tapped a fine strong flow of pure crystal spring water'. The engineer declared the source abundant. The editor of the *Herald* imagined 'playing fountains in our Park; and every householder a fine shower-bath in his upper storey'. Townspeople could at least hope for 'something better than the stagnant corruption of the reservoir, that almost causes their cattle to vomit'.⁵⁹ In time, water drawn by steam engine from Hurley's Springs into a storage tank on Billygoat Hill flowed through pipes into Cootamundra homes. As the town grew in the first decades of the twentieth century, residents looked beyond Hurley's Springs for more secure supplies. Inside the Town Hall early in 1933, jugs of water piped from the Murrumbidgee River lined tables set for dinner. Guests filled tumblers and rose to toast 'The advent of the river water supply'.⁶⁰ Beside the Murrumbidgee at Jugiong, great pumps pushed water eighteen kilometres uphill to a gap on Cowang Ridge, halfway to Cootamundra. Gravity completed the delivery.

Today at Hurley's Springs, a rectangular dam wall extends from the base of the slope. In the afternoon heat of summer, I walked onto a clay and gravel surface. The reservoir had receded since winter—evaporated, drunk by kangaroos, and pumped over the rise to irrigate the golf course. Lying about were many shells of freshwater mussels, a food species gathered by Wiradjuri. People made

⁵⁶ 'Water Supply', *Cootamundra Herald*, 14 November 1885.

⁵⁷ Patricia Caskie, *Cootamundra: Foundation to Federation, history of Cootamundra and district prior to 1901*, Annwel Enterprises, Cootamundra, 1991, pp. 86-87.

⁵⁸ 'Important Discovery', *Cootamundra Herald*, 14 December 1881.

⁵⁹ 'Water Supply', *Cootamundra Herald*, 8 February 1882.

⁶⁰ 'River water is officially turned on', *Cootamundra Herald*, 24 February 1933.



Dam beside Cootamundry Creek at Hurley's Springs, Cootamundra, October 2003.

knives, scrapers, and other tools from freshwater mussel shells.⁶¹ Alongside the shell remains grew flowering plants that looked like old man weed (**budhaany-budhaany**, *Centipeda cunninghamii*). The herb with a pungent aroma is a renowned medicine plant. Roly Williams from the Wiradjuri Regional Land Council had recently pointed out old man weed when we visited Poisoned Waterholes Creek, near Narrandera. I remembered Bob Glanville's stories about the plant. His family, members of the local Gudhamangdhuray clan, harvested old man weed from a dam on Cowcumbra Street, below the northern slope of Billygoat Hill. Bob had not seen the plant growing in the Cootamundra district for decades. Chemical farming killed it out, he suspects. Powerful medicine was made from old man weed:

You'd boil it up. If you had stomach-ache you'd drink the juice. If you had respiratory problems, if you had a bad cold, if you had flu or something, you'd put a towel over your head and get the vapours out of it. Or, if you had a wound, or a sore, or a rash, you'd bath it in the juice of the old man weed. Oh it worked, it was great.⁶²

I rang Bob a few days later. We met at the top of Poole Street and walked over the hill, down towards Hurley's Springs. The plant growing beside the dam, Bob confirmed, was indeed old man weed. Beside the dam we crushed leaves and stems between our fingers and whiffed the spicy scent. As we marvelled over the medicine plant, Bob told me about the time he went yabby (**yabi, yinga**, *Cherax destructor*) catching with his siblings and cousins in flooded swampland near their home on Cowcumbra Street, then a rough track running along the northern edge of Billygoat Hill. They used kerosene tins to build a weir across a drain gouged across the grassy paddock. Bob cut his shin on rusted tin, and the wound became badly infected. When a local doctor could not contain the infection, his grandmother, Melinda Bell, took over the treatment. She collected old man weed, then chopped and boiled the green leaves

⁶¹ Albury City Council, 'Indigenous Heritage', www.wongawetlands.nsw.gov.au/heritage/indigenous.htm, accessed August 2003.

⁶² Bob Glanville, conversation at Treetops, Cootamundra district, 10 February 2001.

and stems. The doctor was amazed at how quickly the solution healed Bob's leg.

We walked back up the slope towards the town. Recently, at the Riverina Archives in Wagga, I had read and photocopied an old story by James Gormly about Cootamundra station and local Wiradjuri, and shared with Bob what details I could remember.⁶³ In the 1840s, Gormly lived at Nangus, near the Murrumbidgee River west of Gundagai. There he knew an elderly and respected Aboriginal warrior settlers called 'Billy the Ram'. Many years later, a surveyor described to Gormly the burial of Billy, an event he had witnessed in 1859. The old man died in the Aboriginal camp on Cootamundra station. Riding past, the surveyor saw Aborigines digging a grave near Cootamundry Creek. He noticed Billy's body wrapped in a blanket and a possum skin rug. Bob wondered if the grave was near where an old mud hut once stood on the Junee road. His grandmother Melinda always warned the children to stay away from the decrepit structure. She told them an evil ghost, a 'bageeyn', lived there.

At the crest of the hill we passed a stack of broad steel pipes. The pipes were to be laid over the western slope of Billygoat Hill, Bob explained, as part of a new effluent recycling scheme. Several dams outside town would hold treated sewerage water, including the Hurley's Springs reservoir we had just visited. The scheme would halve the volume of treated effluent, dangerously rich in salts and nutrients, sent from the Cootamundra sewerage plant down Muttama Creek. The Shire Council planned to irrigate sports ovals, town parks, and the golf course with the recycled water. I wondered if the freshwater mussels in the dam at Hurley's Springs could live in salty, treated effluent. And would old man weed still grow? Once the pipes were laid, the water level of the dam would remain high, even as summer approached. No longer would falling water offer the bare, moist expanses the renowned medicine plant needed to germinate and grow.

⁶³ James Gormly, 'Early Days in this District', Gormly family records, Charles Sturt University Regional Archives, Wagga.



Old man weed and freshwater mussel shells, Hurley's Springs, December 2001.

Driving down Poole Street, we passed a wide concrete depression skirting a grate where the northern slope of Billygoat Hill levels out. A buried network of stormwater drainpipes ensures the low-lying terrain between Billygoat Hill and Muttama Creek rarely floods. Where Bob and his family once caught yabbies and ducks are homes, a primary school, and soccer fields. As a young man in the 1960s, Bob watched workers grade drainways, bury wide concrete pipes, and form streets across Gudhamangdhuray swampland. Housing Commission contractors completed the suburban streetscape with fibro and brick veneer houses. Bob could not remember talking to his grandmother Melinda Bell about the destruction of swampland at Cootamundra. In 1971, the year Melinda fell sick and died, workers built a football oval near the Mercy Hospital across a watery swampland remnant.⁶⁴ Bob imagined the erasure of remaining swampland south of Muttama Creek saddened his grandmother. 'That part of the town was a very significant place for her', he explained, 'a very significant place.'⁶⁵

An oil painting hangs in the entry hall of Bob and Vonnie Glanville's Cootamundra home. The image shows trees, swampland, and streetscapes—the same terrain captured by the anonymous photographer from the northern slope of Billygoat Hill in 1922. Bob had a local artist render the work from a different photograph taken years later, probably in the 1930s. The view extends from a position further east on Billygoat Hill. In the background lies the town—houses, street trees, and the Catholic church. Closer to Billygoat Hill, fences divide swampland into paddocks. A cottage sits in the foreground, where the slope begins to climb southward. Facing an unformed dirt road—Cowcumbra Street—the corrugated iron home has a small front verandah. A clipped hedge and timber fence defines the front boundary. Distanced from Cootamundra by a wide stretch of swampland, the house belonged to Melinda Bell, and was Bob's childhood home.

Marie McGuiness gave birth to Melinda in 1896 at Brungle Aboriginal Station, a government reserve in steep pastoral country near Tumut, east of the Murrum-

⁶⁴ 'Huge crowd expected at park opening', *Cootamundra Herald*, 23 July 1971; and see 'Unremembered voices', Chapter Five.

bidgee River. The reserve population ebbed and flowed throughout the late nineteenth century. Wiradjuri made regular journeys between government reserves—at Brungle, Cowra, Yass, and Warangesda—and unofficial fringe camps, visiting family and maintaining ties to country.⁶⁶ Sometimes over one hundred Aborigines, mostly Wiradjuri, lived on Brungle reserve. Other families camped nearby, beside the Tumut River.⁶⁷ Wiradjuri came from far away to live at Brungle. In the late nineteenth century, townspeople did not welcome Wiradjuri families and individuals displaced by agricultural development and closer settlement. Councils at Gundagai, Tumut, Yass, Cowra, and Cootamundra demanded the Aborigines Protection Board disperse town fringe camps.⁶⁸ Like Warangesda down the Murrumbidgee and Hollywood mission at Yass, Brungle Aboriginal Station lay in pastoral country, outside the more productive and intensively managed agricultural districts. Government reserves offered food rations, accommodation, and the promise of contact with kin. At Brungle, Wiradjuri blended traditional lifeways with settler customs. Until the 1920s, boys were initiated on Mudjarn, a mountain overlooking the reserve. Vince Bulger grew up on Brungle reserve in the 1930s and 1940s. He remembers initiation scars across the chests of old men.⁶⁹ A photograph taken at Brungle in 1894 shows men holding boomerangs and spears, with stripes, dots, and European letters painted across their partly clad bodies.⁷⁰

Arthur McGuinness, Melinda Bell's father, was a Gudhamangdhuray clansman. He worked as a horse breaker on stations in the Yass and Gundagai districts.⁷¹ Arthur may have learned his skills on Cootamundra squatting run, where he probably grew up. The station was known for its great herd of feral horses. In the 1840s, James Gormly helped muster and yard the wild descendents of thoroughbreds sent by John Hurley, absentee Cootamundra squatter, from his Campbelltown property near Sydney. Breakers had a hard job training the fren-

⁶⁵ Bob Glanville, conversation at Cootamundra, 15 December 2003.

⁶⁶ Read, *A Hundred Years War*, p. 43.

⁶⁷ Kabaila, *Wiradjuri Places: The Murrumbidgee River Basin*, p. 74; and Read, *A Hundred Years War*, pp. 37-38.

⁶⁸ Read, *A Hundred Years War*, pp. 35-37.

⁶⁹ Vince Bulger, quoted in Kabaila, *Wiradjuri Places: The Murrumbidgee River Basin*, pp. 83-86.

⁷⁰ Australian Museum, photographic collection.

zied animals.⁷² Melinda's elder brother, named Arthur after his father, was born at Cootamundra. Bob Glanville thought his grandmother probably spent time at Cootamundra as a child. Families moved around, Bob explained. They travelled from Brungle up Muttama Creek to Cootamundra, then sometimes northeast to Cowra.⁷³ As an old man in the 1960s, Melinda's brother Arthur told ethnologist Janet Mathews that Cootamundra was his 'ngurambang', his 'native home'.⁷⁴

In July 1916, the New South Wales Parliament granted the Aborigines Protection Board powers to remove children without approval from parents or the judiciary. The Board instructed Aboriginal reservation managers across New South Wales to list the names of all fair-skinned and neglected children.⁷⁵ Over the first two months, the Board took eleven children from Brungle. Girls were sent to the Aboriginal Girls Training Home at Cootamundra, boys to a similar institution at Bomaderry, north of Sydney. Margaret Tucker lived at Brungle during World War One. She remembered the scarcity of other children: 'Most had been taken away to be trained, never to be seen for many years.'⁷⁶ Melinda McGuinness feared losing her young daughter Iris, Bob Glanville's mother, who was quite fair. In about 1918, she fled Brungle with Iris and returned to Cootamundra, the heartland of her father's clan. Her decision was probably fraught with tension. Cootamundra was dangerous terrain for Aborigines. According to historian and archaeologist Peter Kabaila, the town fringe camp dispersed when the Cootamundra Aboriginal Girls Training Home opened in 1912.⁷⁷ Wiradjuri distanced their children from the new institution and the close reach of Aborigines Protection Board officers. Cootamundra, the place itself, must have called powerfully to Melinda, drawing her back.

⁷¹ Bob Glanville, 10 February 2001.

⁷² Gormly, 'Early Days in this District'.

⁷³ Bob Glanville, telephone conversation, 1 August 2003.

⁷⁴ Arthur McGuinness, taped conversation with Janet Mathews, Brungle, c. 1965, tape held by Bob Glanville; see 'Survival and revolt' Chapter Six, for a longer discussion on the meanings of the term 'ngurambang'.

⁷⁵ Read, *A Hundred Years War*, p. 64.

⁷⁶ Margaret Tucker, *If Everyone Cared: Autobiography of Margaret Tucker M.B.E.*, Grosvenor, London, 1983, p. 82.

⁷⁷ Kabaila, *Wiradjuri Places: The Murrumbidgee River Basin*, p. 59.

Melinda and Iris camped at Hurley's Springs, near the old headquarters of Cootamundra squatting run, beside Cootamundry Creek.⁷⁸ Perhaps Melinda returned to the same campsite Gudhamangdhuray people occupied in the squatting period, a place she may have visited as a child with her parents. Her sister Marie once lived on the Junee road at Hurley's Springs, Bob remembers. Melinda and her daughter later joined a poor community on the western fringe of town, where people lived in self-made shacks. She worked as a nanny for a prominent Cootamundra family. Bob imagined the job lent his grandmother some status, helping to deflect the gaze of Protection Board officers. Melinda saved enough money to build a small corrugated iron house beside swampland on Cowcumbla Street, a track skirting the lower slopes of Billygoat Hill, devoid of other homes.

Melinda's small house soon filled with people. She married John Bell and had two boys. After John died, she later married his brother Bob. Melinda and Bob had a daughter. Melinda's niece, Minnie McGuinness, came to live in the cottage on Cowcumbla Street. Arthur McGuinness, Minnie's father and Melinda's elder brother, had lost his wife. He was worried the Aborigines Protection Board would take Minnie. Melinda travelled to Gooloogong near Cowra on the Lachlan River, and brought Minnie to live in Cootamundra.⁷⁹ Iris, Melinda's eldest child, married Bill Glanville in 1938. They too lived in the cottage on Cowcumbla Street. Iris and Bob Glanville had five children. Bob was their first child. He remembers sharing a double bed with four or five other kids. They slept under 'Wagga rugs'—chaff bags sewn together and quilted with coloured rectangles of cloth—'and we were as warm as toast during those cold Cootamundra nights', Bob recalled.⁸⁰ Journeying kinsfolk sometimes arrived on night trains. Bob woke to find strange children asleep beside him. With many children in the small house, Melinda deeply feared a visit from Aborigines Protection Board officers. She strove to maintain a respectable position in the town. When her job

⁷⁸ Bob Glanville, telephone conversation, 5 August 2003.

⁷⁹ Margaret Berg, conversation at Brungle, 13 August 2001.

⁸⁰ Bob Glanville, in Office of the Director of Equal Opportunity in Public Employment, *Yarnin' Up: Aboriginal People's Careers in the NSW Public Sector*, 2001, www.eeo.nsw.gov.au/indigenous/yarnin.pdf, accessed August 2003.

as a nanny came to an end, Melinda found work in homes and as a cleaner at the primary school. 'She was a nice old lady, old Mrs Bell', Alec Hansen remembered. Melinda worked for his aunt:

She ironed beautifully and washed and sewed, and did all sorts of things. She was a very skilled person, at those things that she'd become familiar with. And there was no reason that if she had been involved in some other trade or whatever, that she wouldn't have been skilled in that: a very intelligent woman.⁸¹

A few years after she left Brungle, Melinda's brother Eric joined her at Cootamundra, ngurambang of the Gudhamangdhuray clan. Melinda was settled and happy, and Eric hoped his family might do well too.⁸² Eric and his wife Martha built an almost identical cottage next to the Bell family home on Cowcumbra Street. He found work as a horse breaker and station hand. Bob remembers Melinda sitting with Eric on her front verandah. With his siblings and cousins, Bob hid in the shrubs at the side of the house and listened to the elderly pair speak in Wiradjuri. Melinda and Eric would scold the children and shoo them away. They did not want the young ones to learn the language. Exhibiting an Aboriginal identity invited danger, Bob explained. Melinda hoped her family would not stand out:

She didn't want us kids to overly identify, even though she knew we couldn't help being identified as being Aboriginal: the way we lived, like we were the fringe dwellers, and obviously, you know. She'd try to spare us a lot. We always had to be spotlessly clean. She was always spotlessly clean, in everything she did.⁸³

Rheumatism and arthritis struck Melinda late in life. 'She was only about seventy-five when she died', Bob said, but 'had worked hard all her life, you know, on her hands and knees scrubbing floors and all of that sort of thing.' In time, 'she just got old and tired.' Melinda died in winter 1971 inside the Mercy Hospi-

⁸¹ Alec Hansen, conversation at Pioneer Park, 9 October 2002.

⁸² Bob Glanville, conversation at Gundagai, 13 August 2001.

⁸³ Bob Glanville, 10 February 2001.

tal, a redbrick Catholic institution on the western side of town. Bob remembers vividly his grandmother breaking 'into a death chant' just before she passed away. Propped up in a hospital bed, Melinda sang in Wiradjuri with strength as her aged body failed. Her chanting seemed to echo throughout the hospital: 'it just went on, it was so repetitive, the same words, the whole time.' The moment was powerful. 'Didn't it make the hairs on the back of your neck stand up', said Bob. As Melinda chanted and death neared, Bob sensed the depth of her cultural knowledge, 'and I thought you know, oh you knew all that and you never ever taught us. You know she had all of that culture and that's all going to die with you.' Melinda's singing evoked confusion and alarm among the Catholic nursing sisters. 'They were absolutely in a state of shock. They were just scurrying around, going nowhere, but just scurrying everywhere'. Dressed in flowing white habits, several nuns knelt in the corridor outside Melinda's room and began to pray.

Melinda was buried in the Cootamundra cemetery, where her father, Arthur McGuinness, also lay. Bob reflected on the way colonial power affected the behaviour and outlook of his grandmother. The danger of passing on cultural knowledge had made her angry and sad, he thought. Melinda always refused to answer his questions about history and places. 'Oh no no, don't want to talk about that. Too sad son', Melinda would say. Despite her caution and reticence, the Wiradjuri clanswoman did, in many ways, offer Bob and his family distinct Gudhamangdhuray identities. Bob learned from Melinda and his mother that they were descended from 'the old Cootamundra clan which lived here'. Melinda taught her children and grandchildren 'the family whistle', Bob explained, a particular call of the pied currawong (**buragurabang**, *Strepera graculina*), the family totem. The melodious calls of currawongs fill Cootamundra streets during winter, when the large black and white birds descend from cold mountain forests to find food and warmer temperatures on the western slopes and southern tablelands.⁸⁴ Bob told me of a recent happening at the horse races in Canberra. He spotted his brother-in-law in the crowd from the racecourse

⁸⁴ M Blakers, S J J F Davies, P N Reilly, *The Atlas of Australian Birds*, Melbourne University Press, Carlton, 1984, p. 641.



House built by Eric and Martha McGuiness, identical to a neighbouring house, now demolished, built by Eric's sister, Melinda Bell, Cootamundra, 2001.

grandstand. Bob had not seen him for over a year. 'I gave him the family whistle', Bob said, the currawong call taught to family members by his grandmother. 'He nearly done a back-flip trying to find me, he recognised it straight away.'

Despite her general reluctance to pass on the language, Melinda did teach the younger generations of her family a scattering of Wiradjuri words and phrases. A second language sometimes proved useful, Bob explained:

Culturally, she only taught us just enough for her to communicate with us kids, when we were kids, you know, with the language and things like that. She taught us enough about the language so she could communicate with us up the street without anyone else knowing! And those words stuck to us, and the family only know a few words, a few sentences, a few phrases.⁸⁵

As a young man, Bob travelled about the region playing football and fighting in a boxing troupe. Melinda would always go too, unless the destination was Wagga. The riverside place, Bob learned from his grandmother, was dangerous terrain, 'bageeyn country, evil spirit country'. When Bob spent a day at Wagga, Melinda would not sleep until she saw him arrive safely home. Melinda told the children about a bunyip stalking the Wagga area, an ominous creature with powers to change shape. Bob remembers sticking close by his mother as a child when the family shopped in Wagga.

Melinda smoked the cottage on Cowcumbra Street when a child fell sick. She warmed the blade of a garden shovel in the fire then walked through each room, kangaroo dung and eucalyptus leaves smouldering on red-hot metal. 'What are you doing Nan?' the kids would ask. 'Oh, make the house smell better, make the house smell better', Bob remembers Melinda replying, evasively. Later, Bob realised his grandmother smoked the house to dispel 'the boorik', the evil spirit making the children sick. When someone caught a cold, the kids went out with Melinda to harvest eucalyptus leaves. They would climb a tree and begin picking. Bob's grandmother ensured they picked only certain clumps

⁸⁵ Bob Glanville, 10 February 2001.

of leaves: 'No not that one! That bunch over there', he remembers Melinda saying. Melinda boiled the leaves to make a solution for drinking, or instructed the children to chew them.

Bob told me how, as a Gudhamangdhuray clansman, his lifeways belie settler mythologies of Aborigines wandering the land without close relations to particular places.⁸⁶ Before travelling to other towns in the region to attend meetings and conferences, Bob contacts local Wiradjuri representatives and asks for permission to speak. He acknowledges the existence of different Wiradjuri groups, and recognises rights of groups over particular sections of tribal land. These rights and responsibilities include the power of assent over access to places and resources, a defining feature of Wiradjuri, the 'no-having' people of the western slopes and plains.⁸⁷

Melinda Bell's bustling household on Cowcumbla Street sat beside what remained of the freshwater turtle sanctuary. Before and after colonisation, Gudhamangdhuray clanspeople identified with the swampland beside Muttama Creek.⁸⁸ Melinda could have built a house on land purchased elsewhere on the fringes of Cootamundra, Bob explained.⁸⁹ But she chose a position beneath Billygoat Hill on Cowcumbla Street, an unformed road without an electricity supply, beside what remained of the sacred Gudhamangdhuray swamp. The low-lying paddocks between the cottage and Cootamundra usually remained wet for most of the year. Waterbirds and frogs called beside rushes and old eucalypts. Melinda and her family caught yabbies and redfin. Bob remembers swans on the swamp. When Muttama Creek overflowed after heavy rain, the children paddled canoes across the flooded paddocks and trapped wild ducks. By returning to her father's ngurambang, Melinda allowed the place of rounded

⁸⁶ Bob Glanville, telephone conversation, 9 July 2003.

⁸⁷ See 'Securing the land', Chapter One.

⁸⁸ See 'Pathways', Chapter Two.

⁸⁹ Bob Glanville, telephone conversation, 20 August 2003.

granite hills and swampland to claim the hearts and minds of her family—'my beloved Cootamundra', wrote Bob.⁹⁰

Modern educational and economic institutions disable the emergence of deeper ethical relations between people and local ecologies, biologist and conservationist Aldo Leopold argued in the 1940s. Western cultural processes drive people away, he observed, from 'an intense consciousness of land.'⁹¹ Narratives of progress block awareness of local places. Movement and change are honoured, relations of commitment and stability devalued. In rural Australia, orientation towards distant markets and future horizons obscures natural patterns and particularities. Scant human consciousness of local ecologies imperils living systems. As philosopher Val Plumwood observes, power rushes into vacuums of disengagement.⁹² On the southwest slopes, eviction and suppression of Wiradjuri people enabled the development of export-oriented systems of primary production. At Cootamundra, within an intensely colonised agricultural district, Melinda Bell maintained family relations with Gudhamangdhuray heartland. It was a remarkable achievement.

⁹⁰ Office of the Director of Equal Opportunity in Public Employment, *Yarnin' Up: Aboriginal People's Careers in the NSW Public Sector*, 2001, www.eeo.nsw.gov.au/atsi/yarnin.doc, accessed August 2003.

⁹¹ Leopold, *A Sand County Almanac*, p. 223.

⁹² Val Plumwood, *Environmental Culture: The ecological crisis of reason*, Routledge, London, 2002, p. 43.

Division

Farmland and 'the environment'

On a hillside of shale and quartz, inside an official 'nature reserve' on the southwest slopes, the trunk of an elderly ironbark is black and furrowed. Ironbark trunks turn even darker with rain, contrasting beautifully with branches of blue-grey foliage rinsed clean. A fence divides the slope, beyond wattles, scribbly gums (*Eucalyptus rossii*), and other ironbarks. Several yellow box trees stand in the paddock below, where sheep graze an 'improved' pasture sown into deeper, richer soil. Trees and other native life express particular knowledge of local terrains.¹ Ironbarks generally indicate shallow, poor soils, yellow box deeper and more fertile earths. The fence line dividing farmland from the nature reserve, yellow box from ironbark, reflects a defining characteristic of the agricultural project: the fragmentation of natural systems. Making rural places 'yield the produce upon which agricultural life depends', anthropologist Hugh Brody explains, involves 'separating manipulable resources from the rest of the environment and working with determination and consistency against all that might undermine this endeavour.'²

The National Parks and Wildlife Service manage a number of nature reserves on the southwest slopes. Bushland cloaks a small area skirting 'The Rock', a

¹ Rose, *Nourishing Terrains*.

monumental stone hill rising above surrounding farmland southwest of Wagga. The Rock Nature Reserve 'is an island of natural habitat for native animals, including the turquoise parrot and glossy black cockatoo', learn visitors to the Service website.³ Like other nature reserves in the region, The Rock Nature Reserve is a stony place of relatively impoverished soils within a sea of farmland. Sharply dividing domains into 'nature' and 'culture' is a peculiarly western activity, a product of the Enlightenment and more ancient western philosophical traditions.⁴ In the Australian agricultural imagination, farmland is associated with culture, bushland and revegetation plantings with nature. Such categorisation reflects what philosopher Freya Mathews calls 'the compartmentalised mentality of modernity', a system of knowledge by which everything undergoes division and segregation.⁵

The logic of modern agriculture divorces primary production from natural systems. Industrial technologies and manufactured inputs, not ecological relations, are relied upon to produce food and natural fibre. Rarely are diverse local communities of trees, shrubs, insects, birds and other animals seen to play a central role in maintaining the productivity of rural places. Denial of natural connectivity underlies the popular notion of 'crop protection'. Avcare is an organisation representing the Australian farm chemical and biotechnology industries. 'Crop protection products', Avcare explains, 'control diseases, insects, pest animals and weeds which harm or destroy our food and fibre crops.'⁶ Farmers depend on poisons to destroy insect populations that threaten vulnerable crop monocultures. According to Avcare, insects are only trouble for farmers and crops:

² Brody, *The Other Side of Eden*, pp. 306-307.

³ NSW National Parks and Wildlife Service, 'The Rock Nature Reserve', www.nationalparks.nsw.gov.au/parks.nsf, accessed December 2003.

⁴ Freya Mathews, 'Terra Incognita: Carnal Legacies', in Laurie Cosgrove, David Evans, and David Yencken (eds), *Restoring the Land: Environmental Values, Knowledge, and Action*, Melbourne University Press, Carlton, 1994.

⁵ Freya Mathews, 'Ceres: Singing up the City', *PAN*, no. 1, 2000, p. 9.

⁶ Avcare, 'Crop Protection', www.avcare.org.au/default.asp?V_DOC_ID=769, accessed October 2003.

Insects can significantly reduce crop yields and quality through their feeding. Insect damage also assists the entry of bacterial and fungal diseases thus further reducing the value of the crop. Insects such as aphids or scale insects can also carry virus diseases from plant to plant and insecticides help minimise this damage by controlling insect pests.

The rhetoric of crop protection casts ecological relations and biological diversity as problematic. Insects interfere with monocropping and must be destroyed. In the same manner, modern farmers seek tight control over weeds. Across open paddocks, herbicides eliminate species classed as competitors with crop plants for sunlight, moisture, and nutrients. Industrial monocropping 'is agriculture as an engineer might conceive it to be', biologist Rachel Carson observed in *Silent Spring*.⁷ Modern agriculture takes great risks to generate abundant harvests. When chemical sprays prove ineffective, or when droughts, storms, frosts, bushfires, and other natural forces strike, severe crop failures unfold. Responding to the major drought of 2002, Member for Murrumbidgee Adrian Piccoli conveyed his understanding of a firm distinction between nature and agriculture. Farmers were at war with Australian nature, the politician explained, an unpredictable and hostile entity:

Drought is one of those almost intolerable hardships Australian farmers have had to endure since the first European settlers began to open up vast tracts of land in the 19th Century. We have toughed it out through the dry times before and, together, we will do it again. Overcoming the difficulties brought about when nature turns against us is never easy.

It is just as well those on the land have inherited the never-say-die, fighting spirit of their forebears. It is just as well Australian farmers are the best at what they do in the world. They have to be.⁸

In 1999, Environment Australia held a conference titled 'Balancing Conservation and Production in Grassy Landscapes'.⁹ The conference title implied a nec-

⁷ Rachel Carson, *Silent Spring*, Penguin, London, 1991 [1965], p. 27.

essary trade-off between primary production and nature conservation. People are not nature, westerners tend to believe, and so farming cannot be integrated within natural systems. Dedee Woodside, ecologist and a director of Murrumbidgee Irrigation, a company responsible for water management in the Murrumbidgee Irrigation Area, recently articulated the popular notion that farmland exists independently of natural systems. We must 'sacrifice' nature to keep ourselves alive, Woodside argued:

So I guess what we're getting to a point of is understanding the landscape a whole lot better, to be able to say: 'this area is good for this function, and should be done intensively and we're prepared, to some extent, to sacrifice it as virtually a factory for the production of food, and not try to expect it to do everything. But in the meanwhile, make sure that the rest of the landscape is somehow or other compensating for that area which is intensively working for us.'¹⁰

Kay Hull, Federal Member for Riverina, suggests the human activity of irrigated farming should be imaginatively and physically divorced from river systems. 'Let us take our production water out of the debate about the health of the Murray-Darling Basin', writes Hull. The politician offers a striking denial of human and economic dependency on wider natural processes: 'We must pipe from the dam wall away from the Murrumbidgee River completely!'¹¹ As global population rises, some people believe that genetically modified plants will enable more production from existing farmland, saving 'natural' terrains from the spread of agri-culture. 'Without biotechnology the world will need to clear more forests and wildlife habitats to keep food production balanced with rising populations', Nobel Prize winning agricultural scientist Norman Borlaug ar-

⁸ Adrian Piccoli, *Drought: A Survival Guide*, pamphlet produced by MSS Media for the Murrumbidgee Electorate Office, Griffith, 2002.

⁹ 'Balancing Conservation and Production in Grassy Landscapes', <http://ea.gov.au/land/bushcare/publications/grasscon/>, accessed June 2003.

¹⁰ Dedee Woodside, on 'The Great Water Debate', *Bush Telegraph*, ABC Radio National, 13 November 2002.

¹¹ Kay Hull, in Daniel Connell (ed.), *Uncharted Waters*, Murray-Darling Basin Commission, Canberra, 2002, p. 17.



Yellow box trees, Retreat, Dirnaseer district, October 2002.

gued on a recent visit to Australia.¹² On the southwest slopes, bands of revegetation plantings and patches of remnant bushland severed by fence lines from much wider farmland spaces remain the norm. 'Natural' fragments and farmland paddocks are rarely seen and managed as one. Industrial production denies ecological connectivity. In Australian agricultural regions, landscape ecologist John Williams observes,

it is often assumed that biodiversity is found only on conservation reserves, on uncleared agricultural land, or on remnant patches of bush on farming land that may or may not be fenced off. However, biodiversity in the agricultural and pastoral ecosystems that make up these lands is often central to the lands' productivity. Agriculture is an ecological enterprise that depends on ecosystem processes and functions—such as soil formation, nutrient cycling, maintenance of hydrological cycles, pollination of crops—which are driven by interactions between elements of biodiversity.¹³

Farmland resilience, stability, and enduring productivity depend on the presence of diverse and interactive communities of species. Inside paddocks devoted to imported crops and pastures, elderly and isolated paddock trees offer habitat to populations of birds, insects, reptiles, and small mammals that limit agricultural pests. Goannas (**giruwu**, **gugaa**, *Varanus varius*) and carpet pythons (**yaba**, *Morelia spilota*) eat mice and rabbits, but require areas of old trees and logs.¹⁴ The deep roots of trees, shrubs, and perennial grasses draw leached nutrients back to the surface and lower salty watertables. Paddock trees enable woodland bird and other animal species to move between wider remnants and

¹² 'Nobel Peace Prize winner backs revolution', Grains Research & Development Corporation media release, www.grdc.com.au/whats_on/mr/borlaug_april2003.htm, accessed June 2003.

¹³ John Williams, 'Towards Sustainable Land Management', p. 7, paper presented as part of the Food for Healthy People and a Healthy Planet internet conference, www.natsoc.org.au, September 2001, accessed February 2002.

¹⁴ David Lindenmayer, Andrew Claridge, Donna Hazell, Damian Michael, Mason Crane, Christopher MacGregor and Ross Cunningham, *Wildlife on Farms: How to conserve native animals*, CSIRO Publishing, Collingwood, 2003.

survive.¹⁵ Areas of regenerating native vegetation improve soil structures, limit erosion, and minimise acidification.¹⁶

In October 2002, dust storms rose from the droughty farmlands and plains of southern New South Wales, from paddocks eaten bare. Brown-red clouds rolled eastward across the tablelands. Farmers could 'manage' land more 'sustainably', some people argued in response, even during droughts. Others pointed to journals of explorers describing dust storms sweeping the region well before the arrival of graziers and wheat farmers.¹⁷ In his book *Dust Bowl*, Donald Worster presents a moving narrative of ecological and social catastrophe on the inland plains of America in the 1930s. Widespread denial of natural connectivity generated the crisis, Worster argues, an observation equally relevant to the past and present of Australian farming. 'Nothing was fixed or permanent; man did not come into a perfectly stable or finished world on the plains', the environmental historian writes. However,

he did encounter there a set of alliances that might have helped him survive. All the living things needed each other, depended on each other, to withstand the harsher side of climate. The earliest humans to settle in the region understood that interdependency well, and respected it, but the white man did neither.¹⁸

Dominant systems of logic based on simplistic dichotomies underlie a general failure to see farmland as part of wider natural systems. Strategies to gain mastery over rural places and deliver primary produce to export markets require perceptions of farmland as a uniform 'Other', an inferior domain distinctly separate from humanity. Colonial processes bring denial of supportive functions offered by diverse local communities of life. Analysis by philosopher Val

¹⁵ Philip Gibbons and Miles Boak, 'The value of paddock trees for regional conservation in an agricultural landscape', *Ecological Management & Restoration*, vol. 3, December 2002, p. 205.

¹⁶ Peter L Smith, Brian Wilson, Chris Nadolny, and Des Lang, *The Ecological Role of the Native Vegetation of New South Wales*, Native Vegetation Advisory Council NSW, Sydney, 2000.

¹⁷ 'Environmentalists blame farmers for dust storms', ABC Western Plains NSW, 24 October 2002, www.abc.net.au/westernplains/stories/s728944.htm, accessed October 2003.

¹⁸ Donald Worster, *Dust Bowl: The Southern Plains in the 1930s*, Oxford University Press, New York, 1979, p. 66.



Revegetation planting, Binalong district, October 2001.

Plumwood of power dynamics active across colonised terrains may be applied to gain insights into the culture of industrial farming. For the powerful 'One', Plumwood explains, 'dependency on the Other cannot be acknowledged, since to acknowledge dependence on an Other who is seen as unworthy would threaten the One's sense of superiority and apartness.'¹⁹ Notions of divorce between land and people block possibilities for the integration of agriculture into the living systems of farming regions. Folding primary production into complex and dynamic terrains requires acceptance of human embeddedness in natural systems, and comprehension of relations binding paddock spaces to wider ecologies. Dependence on insecticides, herbicides, and industrial fertilisers reflects a denial of agricultural and human ecological embeddedness. Imagining a sharp divide between nature and culture brings disorder to local ecologies. The rise of mutually nourishing relations between people and rural places is disabled. More complex, blended alternatives are possible.

Beyond garden fences

We decided to meet for lunch in a homestead garden opened one springtime weekend to the public, west of Wallendbeen. The driveway led through paddocks of wheat and pasture to a house and garden on the crest of a hill. Inside the garden fence, visitors disappeared down pathways to consider European trees and rare Asian shrubs. The property owners had spent much time and effort building and maintaining the garden around the homestead. Apricot roses and pastel irises bustled for attention inside curved garden beds. Blossoming spikes of purple echium swayed in the warm breeze. A pecan tree broke the uniformity of a wide lawn. Shrubs heavy with flowers framed views of farmland and black Angus cattle.

¹⁹ Plumwood, *Environmental Culture*, p. 104.

I remembered camping with a school group in a state forest nearby, several hills away to the south, where ironbark trees and different varieties of acacias thrive. Driving to visit the homestead garden, I noticed spear grass and native cherry (**mambarra**, *Exocarpos cupressiformis*) growing on the roadside reserve. Yellow box stood near the creek flowing northwest towards the Lachlan River. Apart from a handful of white box trees, centuries old, I saw no plants inside the garden fence indigenous to the district. Each specimen, carefully tended, came from elsewhere. It appeared the creators of the homestead garden resisted sensual integration with the lively patterns of hillsides and creek valleys beyond the garden fence. The manicured site seemed an outpost of somewhere else, of distant places and markets the western slopes and plains have served since inland colonisation began.

Gardens encircling family homes hold diverse meanings and associations. An array of personal styles and memories underlie the choices and practices of domestic gardeners. When settler gardens and gardening traditions are considered in a broader context of western culture and colonial history, wider meanings and purposes are revealed. 'Like most of our population, our gardening traditions and styles are largely imported', notes Peter Watts, Chairman of the Australian Garden History Society, in a foreword to *The Oxford Companion to Australian Gardens*.²⁰ Since the beginning of European settlement in Australia, gardens based on British gardening styles have dominated public and domestic spaces. Some early colonists imported and nurtured European garden plants because the specimens evoked memories of loved places left behind.²¹ Later, as the proportion of settlers born in Australia climbed, introduced shrubs and deciduous trees no longer served the homesick. Ordered gardens came to symbolise the success of British colonisation. Public parks and domestic gardens planted mainly to exotic species showed that Australia was more than a vast sheepwalk. Signifiers of agriculture and commerce, manicured gardens suggested that settler Australians rightfully held the continent.²² Planting and fenc-

²⁰ Peter Watts, 'Foreword', in Richard Aitken and Michael Looker (eds), *The Oxford Companion to Australian Gardens*, Oxford University Press, South Melbourne, 2002, p. vii.

²¹ David Goodman, 'The Politics of Horticulture', *Meanjin*, vol. 47, no. 3, spring 1988, p. 403.

²² Goodman, 'The Politics of Horticulture', pp. 410-411.

ing gardens held particular significance within English colonial societies. While representatives of other European powers held ceremonies and sought written permission to gain ownership of distant lands, gardens enclosed by fences often signified possession to the English.²³ Later in the nineteenth century, as squatters and selectors competed against each other for inland spaces, ordered domestic gardens of mostly imported plants expressed rivalling claims over the same terrains. In colonial Australia, women built most domestic gardens. During the early decades of rural colonisation, historian Paul Fox observes, homestead gardens were 'a frontier space where women created a space beyond the sheep run and animal husbandry of their menfolk.'²⁴

Gardening styles and traditions imported from Europe continue to shape homestead gardens throughout rural Australia. Australia's Open Garden Scheme first opened rural and urban domestic gardens to the public in 1987. The non-profit organisation, Chief Executive Officer Neil Robertson explained in 2001, promotes the 'knowledge and pleasure' of gardening 'by opening Australia's most inspiring private gardens to the public.'²⁵ On the southwest slopes, a number of gardens surrounding homes of relatively prosperous farming families are opened to the public each year as part of the Open Garden Scheme. One garden considered inspirational by Garden Scheme selectors encircles a homestead between Young and Cootamundra:

Profuse plantings of climbing roses and perennials are complemented by unusual trees including a pair of thriving European limes. The glorious pink climbing rose 'Mme Griegoire Staechelin' rambles along the front verandah, and many David Austins also flourish.²⁶

In the same district, another homestead garden selected for viewing by the public features 'sweeping lawns' and an array of exotic plants:

²³ Patricia Seed, *Ceremonies of Possession in Europe's Conquest of the New World, 1492-1640*, Cambridge University Press, Cambridge, 1995, pp. 16-29.

²⁴ Paul Fox, 'Homestead Gardens', in Aitken and Looker, *The Oxford Companion to Australian Gardens*, pp. 308-309.

²⁵ Neil Robertson in Neil Conning & Associates (eds), *Australia's Open Garden Scheme Guidebook: 2000/2001*, ABC Books, 2001, p. 6.

In the flower garden lychnis, catmint, hollyhocks, knautia, grasses and sedums feature along with bush roses. Six wooden obelisks support larger-growing roses such as 'Complicata' and 'Souvenir de la Malmaison'. A rosemary-hedged herb and vegetable garden and a quince walk are developing.²⁷

In the nineteenth century, European-style homestead gardens gave sanctuary from land seen as uncomfortable and inhospitable. Ecological disorder wrought by continuous grazing and western agricultural methods intensified the effects of drought. As plant and animal species vanished and ecological wellbeing declined, Paul Fox notes, 'the homestead garden came to be conceived of as an ideal world standing apart from the surrounding landscape; a place of refuge from the elemental forces of nature that periodically crippled the productive landscape.'²⁸ Early in the twenty-first century, homestead gardens continue to offer sanctuary from terrain perceived as hostile and difficult. Rural gardener Fiona Ogilvie writes a regular gardening column in *The Land* newspaper. 'January is when I dream of an English garden', Ogilvie declared in 2002, a year of drought and bushfires.²⁹ She wished for lawns and garden beds able to flourish without hoses and sprinklers. 'The weeding would probably drive me mad, but I conveniently forget about that when I look at our sunburnt paddocks and pray for rain to extinguish the bushfires and bring life to the parched countryside.' Ogilvie had recently visited Europe. Inside the walled garden of Tintinhull House in Somerset, beside fountains and clipped hedges, the columnist 'was struck by how much we can learn from English gardens'. Ogilvie despaired as summer returned. 'Droughts are frightening things', she observed, and homestead gardens gave 'wonderful refuge'.³⁰

Colonists of other lands and people pursue a project of assimilation, Val Plumwood explains, whereby they 'remake the colonised and their space in the im-

²⁶ Conning & Associates, *Australia's Open Garden Scheme Guidebook*, p. 54.

²⁷ Conning & Associates, *Australia's Open Garden Scheme Guidebook*, p. 54.

²⁸ Fox, 'Homestead Gardens', p. 309.

²⁹ Fiona Ogilvie, 'Dreams of lush English gardens so far from the fires', *The Land Magazine*, 10 January 2002, p. 12.

³⁰ Fiona Ogilvie, 'Create a refuge in your garden', *The Land Magazine*, 14 November 2002.

age of the coloniser's own self-space, their own culture or land, which is represented as the paradigm of reason, beauty and order.³¹ Many gardens constructed by Australian settlers reflect the assimilation project Plumwood describes. Domestic gardeners do battle with local ecologies to impose an imported, usually European aesthetic. Successful attempts are honoured. In 2002 Lynne Landy, wife of Victorian Governor John Landy, launched the fifteenth season of Australia's Open Garden Scheme at Government House in Melbourne, a venue steeped in colonial symbolism. She encouraged people to visit open gardens. 'For the gardens in the Garden Scheme are real gardens', Landy declared,

developed by real people who have to struggle against rabbits, possums, soil problems and water shortages yet still manage to produce acres of roses, islands of colour and tranquil plots that soothe the soul, often designed with great artistry. I'd like to quote from the current issue of *Gardens Illustrated*, where Mike Calnan who is the Head of Gardens for the English National Trust says: "We have a problem with our attitude towards gardeners. They are creating works of art and we should respect and reward that." And the Australian Open Garden Scheme does just that.³²

Fences between rural domestic gardens and production paddocks are physical and imaginative divisions crucial to the operation of industrial agriculture. More so than in other parts of western Europe, garden fences played a significant role in English perceptions of nature and society. Separating 'wild' domains from 'cultivated' spaces, fences helped construct the simple binary of 'wildness' versus 'civilisation'.³³ In Australia, gardens established by English colonists reflected the same beliefs. Settlers called land tended by Aborigines 'Wilderness', poet Judith Wright observed, 'hostile country'. The newcomers cast places unmarked by colonial activities as 'untamed, unpleasant and un-

³¹ Val Plumwood, 'Decolonising Relationships with Nature', *PAN*, no. 2, 2002, p. 14.

³² Lynne Landy, 'Launch of the 2002/2003 Season of Australia's Open Garden Scheme', www.governor.vic.gov.au/4A25671B00145208/WebMrsLynneSpeeches/F58AB590E8738CDEC A256CD7000A4186?OpenDocument, accessed June 2003.

³³ Seed, *Ceremonies of Possession in Europe's Conquest of the New World*, p. 28.

productive land—the Waste’.³⁴ Outside garden enclosures resided savage forces, agencies requiring subjugation. Primary production, it was assumed, required hard work and dramatic social and ecological transformation. A pamphlet issued by the Riverina Regional Development Board invites tourists to discover ‘magnificent heritage properties with their manicured gardens of roses and camellias bordered by golden fields of canola and wheat’.³⁵ Inside garden fences, around homesteads, are comfortable spaces. Soft lawns, garden seats, shady trees, and sheltered spaces meet human desires. Outside garden fences, across open paddocks, land and natural forces are subjected to industrial and commercial demands. Despite the revegetation work of Landcare groups and farmers, most paddock spaces remain windswept, exposed to sunlight, reshaped by machinery. Garden fences reflect and maintain the dominant perception of a sharp divide between people and land. Fences enable an imaginative process Val Plumwood calls ‘hyper-separation’.³⁶ Continuities between land and people are denied, differences exaggerated. Rural places and other species are seen as devoid of individuality and agency, a subordinated ‘Other’ vastly different to humankind. Modern agriculture devalues and neglects natural connectivity and dynamism. Colonists divorce themselves from and grasp control over farmland, over terrain seen primarily as a ‘natural resource’ available for industrial use and commercial gain.

The Brindley family bought Bute Park, a farm between Cootamundra and Temora, during the intense and widespread drought of the early 1980s. ‘It felt just like living in a dust bowl’, Merryleigh Brindley told a gardening magazine ten years later.³⁷ A photograph in the magazine shows a view from the homestead garden across a grassy paddock. Eucalypts cloak the crest of a distant hill. A decade before, the paddock ‘was parched and dry and came right up to their front door’, the image caption reveals. No garden or fence divided the homestead from farmland. Inspired by a famous garden in the south of England,

³⁴ Judith Wright, *Born of the Conquerors: Selected Essays by Judith Wright*, Aboriginal Studies Press, Canberra, 1991, pp. 18-19.

³⁵ Riverina Regional Development Board, *Discover the Parks Gardens & Reserves of the Riverina*, pamphlet, c. 2000.

³⁶ Plumwood, ‘Decolonising Relationships with Nature’, pp. 10-11.

³⁷ ‘On the land’, *Garden Design*, Australian House & Garden, Sydney, 1992, pp. 26-41.



Crop stubble recently burned, Retreat, Dirnaseer district, April 2001.

Brindley set to work. She planted an array of imported species—roses, Italian lavender, snow-in-summer, lilac, silver birch, maples, crab apples—installed birdbaths, ponds, and a watering system, and established pathways and lawn. The magazine journalist described ‘a sanctuary of flowers and foliage that appears almost as a mirage among the treeless paddocks.’ To make room for more plants, Merryleigh Brindley shifted the garden fence further out into the paddock several times. ‘From an unbearable dust bowl, we now have, just 10 years later, a cooler climate around the immediate house, very little dust and just the sweet scent of flowers and blossoms wafting through’, Brindley explained. In another photograph, garden shrubs frame a view into the paddock. Sheep graze pasture on the other side of the garden fence. ‘A view to the Bute Park sheep in the paddock shows what an oasis this garden is’, the caption reads. Outside the homestead garden, sheep occupy a space in which people do not belong.

Casting a sharp division between people and farmland, the imaginative framework of modern agriculture then denies the diverse nature of rural places. Simple homogeneity, not complex diversity, is seen to characterise farmland. ‘Bread is the staple food of the white races’ observed Robert Watt, Emeritus Professor of Agriculture at the University of Sydney, in 1955.³⁸ To meet market demands for standardised food and fibre products, settlers must impose a uniform aesthetic of wide crops and pastures over varying rural terrains. Particularities and intricacies of local places are erased. Across the globe, colonists from western Europe generated an aesthetic sameness as they applied industrial technologies to harness land for wheat production. *An Open Land: Photographs of the Midwest, 1852-1982*, contains an image titled ‘Grain Elevator and Plowed Fields, Wellington, Kansas, 1973.’³⁹ The photograph shows a paddock of stubble and turned earth. Grain silos stand beside railway tracks. Several mature trees are visible on the horizon. I searched ‘wellington kansas’ on the web to discover more about the place. The website on the top of the list featured a photograph of a road sign. ‘Wheat Capital of the World’, the sign read, below a stylised repre-

³⁸ Robert Watt, *The Romance of the Australian Land Industries*, Angus and Robertson, Sydney, 1955, p. 202.

³⁹ Victoria Post Ranney (ed.), *An Open Land: Photographs of the Midwest, 1852-1982*, Open Lands Project, Chicago, 1983, p. 75.

sensation of three grain-filled heads of wheat.⁴⁰ The two photographs from the agricultural heartland of the United States are similar to some I have taken on the southwest slopes of New South Wales. Mine too show wide paddocks of ploughed earth, concrete silos, railway tracks, elderly trees, and road signs representing districts in terms of wheat production.

Perceptions of rural places and other species as homogenous and inferior enable the harnessing of land for primary production. Powerful, monological relations require devaluation and denial of individuality and diversity within a subordinated group. The dominant 'One' sees the colonised and distinctly different 'Other' in simple terms, as readily knowable and controllable. Responsiveness towards particular needs of local ecologies only complicates and blocks attempts to secure wide areas for monocultural, export-oriented production. Power enables colonists to ignore demands and needs rising from subordinated places, as Val Plumwood explains:

Notice how these features result from power and work together: thus, to the One, sensitivity to differences among the Others is of little importance, unless they affect his own welfare, because power or force can take the place of sensitivity, whereas sensitivity to differences among the masters is likely to be very important for the survival of the subordinated. Diversity which is surplus to the centre's desire and need does not require respect or recognition. Thus knowability and lack of diversity is likely to be strongly stressed for the subordinated group.⁴¹

Drought and fire shaped the living systems of the southwest slopes. Regardless of the season, many grassy woodland plants respond to rain with flowers and fresh growth. In preparation for dry times, perennial grasses and shrubs send roots deep into the earth. The fleshy tubers of chocolate lilies, native geraniums, waxlip orchids, and other herbs enable regeneration after drought and fire. Instead of recognising diversity and finding ways to integrate primary production

⁴⁰ 'Wellington, Kansas', information presented by the Wellington Public Library, <http://skyways.lib.ks.us/towns/Wellington/>, accessed June 2003.

⁴¹ Plumwood, *Environmental Culture*, p. 103.

within a rich variety of local ecologies, settlers applied western science and industrial technologies to impose a simple patchwork of imported crops and pastures. Farmers rely on the successful harvest of annual crop species—wide monocultures vulnerable to insects, diseases, frosts, storms, droughts, bushfires, and other natural forces. Annual crops depend on regular seasonal patterns. Colonial denial of both ecological diversity and the erratic patterns of Australian climate continue to block cultural changes necessary for the regeneration of rural places. Refusal to recognise and respond to ecological particularities and indigenous nature enables the operation of industrial systems of livestock grazing and monocultural cropping. ‘Cootamundra is a place where the seasons are distinct’, claimed the magazine journalist who visited the garden established by the Brindley family at Bute Park. Telling readers that the predictable flowering of imported plants marked the regular passing of seasons, the magazine cast exotic species and foreign seasonal patterns as natural to the southwest slopes. ‘Spring seems to be dominated by forsythia and crab apples’, said gardener Merryleigh Brindley,

the summer is just a mass of old-fashioned roses that I have been growing for 25 years. Autumn sees all the berries come out and the garden is full of clumps of maples that turn a wonderful colour. Winter has camellias in bloom and lots of bulbs popping up.⁴²

Wiradjuri artist and writer HJ Wedge was born late in the 1950s on Erambie mission, an Aboriginal reserve beside the Lachlan River at Cowra, northeast of Young.⁴³ In his book *Wiradjuri Spirit Man*, Wedge describes a garden different to those established by colonists around homesteads in Wiradjuri country. Wedge does not perceive sharp boundaries between people and productive land. Before colonisation, he explains, the entire continent was a garden, a ‘nourishing terrain’ in which people saw themselves embedded.⁴⁴ By the late twentieth century, the bountiful garden was lost:

⁴² ‘On the land’, *Garden Design*, Australian House & Garden, Sydney, 1992, p. 30.

⁴³ HJ Wedge, *Wiradjuri Spirit Man*, Craftsman House, Roseville East, 1996, p. 9.

⁴⁴ Rose, *Nourishing Terrains*.

Over the centuries many children have been living in this garden of theirs with their own lore. Till the white people came along and destroyed the garden over two hundred years. They are destroying the rainforests to make toilet paper and digging up the land to mine and poison the land and water with chemical waste and if you don't fuckin' believe me you can get in your car and drive around this ruined garden of ours.⁴⁵

According to forester and biologist Aldo Leopold, ethics and ethical behaviour rests on a single premise: 'the individual is a member of a community of interdependent parts.'⁴⁶ Uncooperative behaviour is unethical, because it undermines the strength and wellbeing of interconnected social and ecological communities. Western systems of knowledge and colonial processes continue to block possibilities for settler Australians to accept and understand their own physical embeddedness within local ecologies. Denial of human dependency on living systems underlies neglectful actions. Perceptions of people as separated from and in control over farmland, and failure to acknowledge and respond to ecological needs of rural places, perpetuates the wounding of local ecologies across the southwest slopes.

An industrial picturesque

A giant kurrajong stands in Albert Park. Sturdy limbs hold cool green sprays of leaves. Enormous roots have swollen the red earth into a wide mound. Nearby is a yellow box tree, tall and elderly, with a trunk of flaky bark. Most trees and shrubs in the park come from elsewhere. English oaks shade play equipment. There are elms and pines, peppercorn trees and oleanders. The kurrajong and yellow box probably grew to maturity a long time before 1878, the year Cootamundra townspeople chose a name for the local recreation ground. They named Albert Park in memory of Prince Albert, husband of Queen Victoria, a

⁴⁵ Wedge, *Wiradjuri Spirit Man*, p. 80.



Chocolate lily flowers, Wallendbeen cemetery, December 2003.

brass plaque beside the cricket oval explains. In 1877, the arrival of the Great Southern Railway fuelled local commerce and town development. Townspeople decided to transform the unkempt public recreation ground into an ordered park. The space would enable 'recreation to help in the physical development and rational enjoyment of our youth', the *Cootamundra Herald* observed.⁴⁷ Many people were expected to settle in Cootamundra. They would need somewhere to breathe fresh air and rest. Trustees of Albert Park fenced the five hectares between the railway track and the main street. In winter they planted trees ordered from a nursery at Parramatta, near Sydney. The parkland surface was harrowed, levelled, and sown to couch grass. As spring approached, Albert Park would 'assume a really beautiful and ornate aspect', the *Herald* told readers.

Cootamundra grew into a substantial commercial centre as closer settlement and agricultural development proceeded in the final decades of the nineteenth century. In 1900, a Sydney journalist described a 'fine town, with a nineteenth century air of civilisation about it'.⁴⁸ The setting of the town appealed to the reporter:

The situation is a most charming one, the town being picturesquely situated, though not too closely, near wooded hills to the south, one of which, Mount Coghlan, the highest, rises into a minor kind of sublimity, the sides clothed with forest trees.⁴⁹

The Sydney journalist perceived a limited degree of sublime power in Mount Coghlan, a steep granite hill just south of Cootamundra. In the nineteenth century, descriptions of 'sublime' natural features, rugged and monumental, implied the presence of awesome natural forces able to challenge and overwhelm human will. Describing the town as 'picturesquely situated', the reporter framed the Cootamundra district in 'picturesque' terms, another popular aes-

⁴⁶ Leopold, *A Sand County Almanac*, pp. 203-204.

⁴⁷ *Cootamundra Herald*, 20 August 1878.

⁴⁸ 'Some Southern Towns. Cootamundra Described', *Freeman's Journal*, 16 June 1900.

⁴⁹ *Freeman's Journal*, 16 June 16 1900.

thetic category of the nineteenth century. As cultural historian Maria Tumarkin emphasises, meanings of 'sublime' and 'picturesque' are somewhat vague and shifting. Nevertheless, she explains, the two conventions of seeing are different, and should not be conflated.⁵⁰ Whereas 'sublime' landscapes and features were generally characterised by 'transcendence and excess', places described as 'picturesque' were considered distinctive for their 'mildness and utility'. Applying the perceptual framework of the picturesque, the reporter visiting Cootamundra in 1900 cast the undulating, grassy woodlands surrounding the town as fertile terrain available for transformation into farmland. 'Where weeds formerly throve in rank profusion', wrote the journalist, 'apple and pear and peach trees are now heavy with precious fruit'. Before the arrival of the railway, the area around the town of Cootamundra 'yielded a subsistence to a few'. Now cleared of trees and dramatically altered by industrial technologies, the same land 'repays the skilful farmer a hundredfold'. Rail access to Sydney and Melbourne secured a market for local grain. As selectors transformed grassy and timbered hillsides into farming paddocks, much land remained beyond reach inside the boundaries of wide pastoral stations:

All over the district farms have been laid out and paddock after paddock of wheat, thousands of acres in extent, have been cultivated. Still a great portion of the land is locked up in principalities. This country produces cereals in a state of perfection. The wheat raised here is of the best quality for flour.⁵¹

In England during the late eighteenth century, Reverend William Gilpin identified as 'picturesque' any natural elements and objects considered 'proper subjects for painting.'⁵² An influential authority on the new and popular aesthetic style, Gilpin felt landscape paintings had to conform to certain conventions before they could be categorised as picturesque compositions.⁵³ A picturesque landscape painting required a foreground, middle ground, and background. An

⁵⁰ Maria M Tumarkin, *Secret Life of Wounded Spaces: Traumas in the Contemporary Australia*, PhD thesis, Department of History, University of Melbourne, 2002, p. 125.

⁵¹ *Freeman's Journal*, 16 June 1900.

⁵² William Gilpin, quoted in Simon Ryan, *The Cartographic Eye: How Explorers saw Australia*, Cambridge University Press, Melbourne, 1996, p. 62.

⁵³ Ryan, *The Cartographic Eye*, p. 63.

interesting and unifying visual feature occupied the middle ground. Towards the edges of the picturesque composition, trees or rocks darker than the middle ground framed the work and drew attention to the central feature. Picturesque conventions never demanded close and faithful attention to the intricacies and distinct patterns of the land. Places and vistas represented resources available to the human aesthetic imagination.

Picturesque views of land were traditionally captured from an elevated position, literary critic Jonathan Bate explains, from 'a raised promontory in which the spectator stands above the earth, looking down over it in an attitude of Enlightenment mastery.'⁵⁴ As Bate notes, the aesthetic category of the picturesque emerged in Britain as the industrial revolution unfolded in the eighteenth and nineteenth centuries.⁵⁵ Picturesque conventions positioned humans above and in control over nature, reflecting and reinforcing the same Enlightenment philosophies enabling industrialisation. The framework of the picturesque cast wide areas reshaped or reimagined by humans as natural and unchanged, obscuring the histories and particularities of the land.⁵⁶ Picturesque representations distance people from places, enabling subjugation of land and natural forces for human and economic gain. Convict artist William Buelow Gould, is the central character of *Gould's Book of Fish*, a novel by Tasmanian writer Richard Flanagan. Gould disparages picturesque landscape painting, a genre admired by his masters and other powerful colonial officials. 'I care not to paint pretend pictures of long views which blur the particular & insult the living', Gould declares with passion, 'those *landscapes* that trash the truth as they reach ever upwards into the sky, as though we only know somewhere or somebody from a distance—that's the lie of the land while the truth is never far away but up close in the dirt, in the vile details of slime & scale & filth along with the Devil, along with the angels, & all snared within the earth & us, all embodied in a single pulse of a heart—mine, yours, ours'.⁵⁷

⁵⁴ Jonathan Bate, *The Song of the Earth*, Picador, London, 2000, p. 132.

⁵⁵ Bate, *The Song of the Earth*, pp. 126-152.

⁵⁶ Bate, *The Song of the Earth*, p. 136.

⁵⁷ Richard Flanagan, *Gould's Book of Fish: A Novel in Twelve Fish*, Picador, Sydney, 2001, p. 93.

Reflecting on the writings of European explorers in Australia, cultural historian Simon Ryan shows how picturesque conventions of seeing held particular ideological agendas. Within picturesque aesthetics, Ryan argues, is hidden 'an instrumentalist agenda which establishes nature solely as an object to be valued according to its ability to please and serve human beings.'⁵⁸ The primary goal of Australian exploration was to discover rivers and fertile soils—terrain suited to pastoralism and agriculture.⁵⁹ An imperial desire for natural assets underlay descriptions by explorers of certain views and places as picturesque. As Simon Ryan explains, 'if the land was picturesque it was ripe for transformation into wealth.'⁶⁰ On the southwest slopes of New South Wales, explorers frequently described grassy and fertile terrain in picturesque terms. Charles Sturt and his exploratory party journeyed down the Murrumbidgee valley west of Gundagai in December 1829. Sturt climbed a hill and described the view:

There is an extensive flat to the westward, which we shall traverse tomorrow, in which direction the valley of the Morambidgee is plainly marked out. The river has increased both in depth and breadth, and rolls along a vast body of water. The general appearance of the country is unchanged. It is extremely rich and picturesque.⁶¹

Sturt neared the future site of Wagga a few days later. He thought the area held great potential for British colonisation, and again applied picturesque conventions of seeing to frame his judgement:

The forests behind the flats in this branch of the river are admirably adapted for grazing. The soil has fallen off a little in quality, but it is still fine, and is better perhaps for the purposes of agriculture than the richer earths of the upper district. We experience delightful & cloudy weather, and the scenery around us is cheering and picturesque.⁶²

⁵⁸ Ryan, *The Cartographic Eye*, p. 57.

⁵⁹ Michael Cathcart, 'Exploration by Land', in Graeme Davison, John Hirst, and Stuart Macintyre (eds), *The Oxford Companion to Australian History*, Oxford University Press, South Melbourne, 2001, pp. 233-234.

⁶⁰ Ryan, *The Cartographic Eye*, p. 57.

⁶¹ Sturt, *Proceedings of an Expedition into the Interior of New Holland*, pp. 19-20.

⁶² Sturt, *Proceedings of an Expedition into the Interior of New Holland*, p. 22.

In Australia, Simon Ryan explains, British settlers adapted the strict picturesque conventions identified by William Gilpin to satisfy the agendas of colonisation. Modified picturesque frameworks gave colonial activities and alterations to places a pleasing sense of approval. According to Gilpin, picturesque landscapes never featured evidence of industrial activity. Australian explorers altered the picturesque framework, sanctioning British colonisation by placing buildings and fences within picturesque descriptions and compositions. The 'industrious hand of man', explorer John Oxley observed, was 'improving the works of nature'.⁶³ Almost two hundred years later, picturesque frameworks still dominate representations of rural Australian places. Wire fences are 'part of the landscape' of inland Australia, a recent advertisement for steel fencing products declared.⁶⁴ Picturesque conventions of seeing cast fences and even gully erosion as 'natural' components of the land. 'We're as much a part of the Country as the Gums and the Gullies', asserted an advertisement for steel agricultural products in 1987.⁶⁵ Naturalisation of fencing and other industrial devices casts exclusive possession of land and agendas of mastery over rural places as natural also.

A sign erected by the Riverina Regional Development Board stands beside the road on the Cootamundra Shire boundary. The road sign welcomes travellers to the Shire, 'Gateway to Riverina... naturally'. According to its website, the Board chose the slogan 'Riverina... naturally' to emphasise 'the clean air, water and soil of the Riverina, which support the rich and diverse agricultural and horticultural production underpinning the regional economy.'⁶⁶ At the top of the road sign is the logo of the Riverina Regional Development Board, a wide and stylised view of a crop. Straight green lines representing crop rows narrow then disappear over the horizon. The rising sun radiates beams into blue sky, reflecting the crop lines below—a harmonious blend of sun, earth, and industry. Pre-

⁶³ John Oxley, quoted in Ryan, *The Cartographic Eye*, p. 80.

⁶⁴ OneSteel Wire Pty Ltd advertisement, 'Waratah Fencing. Part of the Landscape', *The Land*, 20 March 2003.

⁶⁵ BHP Steel, 'BHP Steel. We're as much a part of the Country as the Gums and the Gullies', advertisement in *Australian Agriculture*, National Farmers' Federation, Camberwell, 1987, p. 41.

⁶⁶ Riverina Regional Development Board, www.rrdb.com.au, accessed January 2003.

senting industrial production methods as beautiful, the logo reflects what political scientist James Scott calls 'the visual aesthetic of agricultural high modernism', a style generated by a confident and expansive industrial culture.⁶⁷ There is no tension, the logo suggests, between local ecologies and the intense demands of an export-oriented, industrial system of primary production. The view is uniform and picturesque, a pleasing and comfortable prospect. Inscribed below the logo, the Board's slogan, 'Riverina... naturally', conveys the dominant western perception of land as a 'natural resource' available for transformation into regular rows by industrial machinery. Irregularities and complexities of rural places are obscured and denied, reaffirming a way of seeing responsible for the disordering of local ecologies.

Other applications of the picturesque fuel commercial activity in the Cootamundra district. A tourist brochure issued by the Cootamundra Development Corporation suggests a number of scenic drives.⁶⁸ Visitors are directed to an 'excellent photo stop' on a rise northwest of Cootamundra, where 'the views out towards Stockinbingal are nothing short of spectacular'. From the vantage point, tourists may 'soak in the scenic farmland views'. As the main road southeast of Cootamundra rises, 'magnificent views across the Muttama Valley' become visible. The outlook from the ridge is 'spectacular all year round, particularly in September—a patchwork of green and yellow with the Canola in flower.' According to the promotional pamphlet, local farming practices are comfortably intertwined with natural cycles. Shifts in industrial activity mark seasonal changes, an image serving to naturalise the forceful imprint of science and technology on the land:

Tractors preparing paddocks for sowing in the autumn; new crops in a range of vibrant colours and fruit and nut trees in blossom herald spring's bounty; and towards the end of the year comes the harvest when everyone works around the clock. That's when you'll see headers stripping crops till late at night, their

⁶⁷ Scott, *Seeing Like a State*, p. 281.

⁶⁸ Cootamundra Development Corporation, *Cootamundra, an invitation to a special way of life*, Cootamundra, 1997, pp. 30-31.



Road sign, Cootamundra Shire boundary, Harden road, June 2003.

headlights moving up and down the rows like spaceships in the dark. It's also when you'll find truckloads of grain being carted to the silos.⁶⁹

To maintain the high levels of primary production necessary for farmers to survive in the global marketplace, land must be continually reshaped. In a matter of days, broad-spectrum herbicides turn green paddocks yellow in preparation for cropping. Wide ploughs and seeding equipment expose soils. In agricultural areas, vast quantities of diesel fuel are consumed at sowing and harvest times as tractors trail across paddocks and trucks haul fertiliser and grain. Industrial agriculture relies on picturesque frameworks to cast land as malleable terrain on which uniform crop monocultures may be imposed. In 1999, the Prime Wheat Association of New South Wales issued a calendar illustrated with rural scenes.⁷⁰ One photograph shows a view of Harden district farmland. Rows of cereal crop stubble extend across a slope behind a wire fence. True to the formal conventions of the picturesque, the shaded branches and trunk of a yellow box tree frame a bright expanse of stubble in the middle ground. A second photograph in the calendar shows a tractor driving through crop stubble swept by flame, across land undergoing strident transformation. Another image is of two children gazing into a yellow paddock of flowering canola. Beside the canola crop, at the centre of the photograph, a sickly tree appears close to death. The calendar image of the two children, seemingly oblivious to the dying paddock tree, suggests the ideological agenda of the picturesque. To enable mastery over farmland, picturesque imagery constructs perceptual and emotional barriers between people and the intricate natural patterns of rural places. Concern for a sickly paddock tree is unwelcome, as attention might undermine the validity of industrial cropping practices responsible for such ecological disorders. Picturesque frameworks of perception obscure and deny the fragmentation of natural connectivity wrought by modern farming. Industrial farmland is presented as attractive and wholesome, undermining potential criticism. Distance between people and land engendered by the picturesque and other cultural processes

⁶⁹ Cootamundra Development Corporation, *Cootamundra, an invitation to a special way of life*, p. 6.

⁷⁰ Prime Wheat Association Limited, 2000 calendar, Dubbo, 1999; I am grateful to Graham Strong for sending the calendar and for pointing out the significance of its imagery.

enables the unleashing of force.⁷¹ 'Have more power to the ground than ever before', declares an advertisement published recently for a powerful new range of tractors. 'The powerful 8.1 litre and 12.5 litre POWERTECH® engines create a tremendous power response.' Inside the tractor cabin, high above the paddock, operators are in control:

The exclusive CommandView™ cab helps make hours fly by. It's quiet, spacious and visibility is second to none. Controls rest virtually at your fingertips with the exclusive John Deere CommandARM™. The all-new FieldVision™ lighting option uses high-intensity xenon-gas lamps to improve vision, clarity and distance.⁷²



From a stony hillside, under the dense shade of an old kurrajong tree, I looked southeast towards blue ranges defining the horizon. Australians are familiar with paintings and photographs of rural vistas like the one that extended before me. At the base of the hill, homestead chimneys and a corrugated iron roof rose from a wide garden. Ewes and lambs grazed ryegrass and clover beside tall eucalypts. Several willow trees stood on the bank of a creek, near shearers' quarters and a voluminous woolshed. A steel fence passed between a weather-board cottage and a farm dam. Sheep tracks wove outwards from a cement water trough, across paddocks threadbare with loose stubble.

The decaying remains of a racehorse had nourished the kurrajong I stood under. 'Featherstitch 1905-23', a marble headstone reads beside the tree. My father's grandfather bred racehorses here on Retreat, a property between Cootamundra and Temora. Horses have a long history alongside Pinchgut Creek, an intermittent waterway curving through Retreat towards the Murrumbidgee River. In the early decades of colonisation, mobs of wild horses retreated from

⁷¹ See last paragraph of 'Returning to Cootamundra', Chapter Three.

⁷² 'Experienced, field proven performers', *The Furrow*, John Deere Ltd, Neutral Bay Junction, no. 3, 2002, p. 22.

more densely settled country along the Lachlan and Murrumbidgee rivers. The animals found refuge in distant hills, beside swamps and creeks, and gave Retreat its name. In 1931, long-time Temora district resident Harry Kavanagh shared his memories of the local area. The elderly man remembered Mimosa station, west of Retreat, 'infested with wild horses and kangaroos' in the 1870s.⁷³ About the same time, the new owner of Berthong station, northeast of Retreat, reportedly trapped and killed twelve hundred horses in one year.⁷⁴ My grandfather told my father why a paddock on Retreat was named 'Trapyards'. Years ago, there was a set of yards in the paddock where workers corralled mobs of wild horses. Two men stood either side of a narrow gate. They each held a pole with a sharpened blade from a pair of hand shears bound to the end. When the gate opened, the men slashed the bellies of the horses as they rushed to exit. The frightened animals galloped away to die slowly and painfully among white cypress pines and yellow box trees. Graziers considered mobs of wild horses a demonic barrier to pastoral development, Mary Gilmore explained, 'to be blotted out like the blacks.'⁷⁵

Several quandong trees, my great aunt remembers, grew in a paddock south of the hillside where I stood. And a pair of bush stone-curlews (**guriban**, *Burhinus grallarius*), ground-dwelling birds now extinct locally, lived beside the road leading to Sarafan, a neighbouring property owned by her brother.⁷⁶ The quandongs and curlews vanished decades ago. Looking southeast from my vantage point across a lucerne paddock, I noticed a tall yellow box tree, pale limbs holding leafy arcs to the sky, beside the woolshed and its network of mesh yards. My father taught me to ride a bike there, on red earth compressed by generations of sheep, hooting encouragement as I began to circle the wide, fibrous girth of the elderly eucalypt. Beneath the kurrajong tree, I viewed the childhood event years later, from a distant position. As in framed images of rural vistas, particular details remain obscure.

⁷³ Watson A Steele, *Temora's jubilee souvenir (illustrated): containing history of Temora*, J A Bradley, Temora, 1931.

⁷⁴ James Gormly, 'Early Days in this District: The Back Stations', Gormly family records, Charles Sturt University Regional Archives, Wagga.

⁷⁵ Mary Gilmore, *More Recollections*, Angus and Robertson, Sydney, 1935, p. 15.

⁷⁶ Agnes Main, conversation at Retreat, Dirnaseer district, 2 April 2001.

I left the cool shade of the kurrajong and began walking downhill. Over the road, in the paddock of lucerne, pale green domes of peppercorn trees rippled in the heat. The original Retreat homestead stood somewhere between them, above a swamp and several dams on Pinchgut Creek. Traced in black ink, the swamp appears on Parish of Hurley maps issued by the Department of Lands more than a century ago.⁷⁷ Where old maps indicate swampland I encountered a deep, dry creek channel curving through crop stubble. No swampland plants, no expanse of dark, wet earth. During wet winters, the paddock upstream turns sodden. There, east of Retreat homestead, Pinchgut Creek loses definition in a level area studded with rushes. My great aunt remembers walking with her brothers and sisters to school, a small building on the other side of the flat and sometimes swampy paddock. To save her feet getting soaked when the area did hold water, she walked right alongside the fence where the ground was slightly higher. Her parents came to Retreat in 1905 and planted an orchard below their new pisé homestead, on the northern edge of the swamp marked on parish maps, into earth deep and moist.

Only the upstream part of the swampland remains today. A handful of elderly fruit trees still grow there. Downstream, in the paddock of crop stubble where the main body of the swamp used to be, I stepped into the dry channel of Pinchgut Creek. Several layers, I noticed, make up the channel wall. From the paddock surface down is a deep band of light coloured soil washed from surrounding hills. Underneath, lower down the channel wall, runs a dark layer of ancient swamp earth, rich with rotted plant material. The differing bands of soil record a history of cultivation, grazing, and drought, of hillsides disturbed and bare.⁷⁸ In summer heat, questions rose from Pinchgut Creek. When did heavy storms bury the swampland under loose soil? How long did it take for the

⁷⁷ Land and Property Information NSW, 'Parish Map of Hurley, County of Clarendon', Department of Lands, 1893, www.lpi.nsw.gov.au/maps/pmap/search/pmap_websearch.display, accessed June 2003.

⁷⁸ For detailed analysis of channel incision and related erosion processes in part of the Murrumbidgee River catchment since colonisation see B J Starr, R J Wasson and G Caitcheon, *Soil Erosion, Phosphorus & Dryland Salinity in the Upper Murrumbidgee: Past Changes & Current Findings*, Murrumbidgee Catchment Management Board, Wagga, 1999.



Pinchgut Creek, Retreat, Dirnaseer district, January 2003.

channel to carve its way through the layers of earth? Years ago someone, perhaps my grandfather, threw old fencing wire, bent steel posts, broken machinery parts, and rusted iron sheets into the actively eroding head of the channel upstream. But floodwaters proved stronger. Today the erosion process continues, as Pinchgut Creek channels into the northern remnant of winter swamp-land, slowly erasing the natural feature.

In the creek bed lay a sheep carcase—rotten skin, bones, and wool—in a dry waterhole below the black band of swamp earth. Midday sunlight made its white skull shine. I climbed out, onto the overlay of eroded soil and stubble, the remains of a wheat crop. A willy willy approached from the southwest, where Pinchgut Creek vanishes behind a slope. The spinning tunnel of dusty air and stubble made noise in the crowns of yellow box trees. On the other side of the waterway, near where the parish maps say the swamp began, I noticed a tall and sturdy red gum standing alone. The tree looks like a river red gum, a species common in watery places, but rare in dry paddocks like this one, beside a minor creek high in the Murrumbidgee basin.⁷⁹ I imagined the tree growing to maturity centuries ago, when rushes grew here in damp black earth. Did the ancient organism, I wondered, hold memories of the dead swamp and its people?

Walking away, I stopped to examine flakes of stone near the creek bank, tools and workings unearthed by plough blades and the hard hooves of livestock. Some flakes were long and narrow. Others, knocked from white quartz, were short and angular. I admired a large flake, smoky blue with red lines. My finger traced the sharp edge of a blade worked from a smooth, extremely fine-grained stone, pure black. Squatting, close to the earth, I encountered traces of history, stories and particularities invisible from a distance. A call on the present seemed to rise from the lost swamp. Paddocks silenced, emptied of history and

⁷⁹ Four species of eucalyptus commonly called 'red gum' grow on the southwest slopes: *E. dwyeri*, *E. dealbata*, *E. blakelyi*, and *E. camaldulensis*. See 'The Red Gum Story', in Stelling, *South West Slopes Revegetation Guide*, p. 92; and see paragraphs on Joseph Dwyer in 'Survival and revolt', Chapter Six.

varied life, are made to grow uniform products for distant markets. In the summer dryness, the wounded place cried out for recognition and response.

Curtains of sandstone and power

'The Riverina, as the country watered by the Murrumbidgee is called, presents the most classical landscape in Australia', historian and novelist Marjorie Eldershaw wrote in 1939. At the time, Australian nationalism was bound to farmland and agricultural production:

In the paddocks there are all the tones of sunburnt yellow, brown, sage green, an undercurrent of purple and mauve, in the soil, in dead bushes and timber. Distant scrub and shadows are blue. Fallowed land and lucerne crops make patches of rich dark colour and vivid green. The wheat stands green and bronze. Sheets of water in the dams shine like galvanised iron, iron roofs look like water among the trees. Breakwinds of dark trees round bleached white homesteads accent the country. The silos, great blind towers, standing at the railway sidings bring the scene into focus. The paddocks are scrabbled with sheep tracks as if giant fingers had been drawn through the grass. The sheep themselves, neutral coloured, fit the country like a natural feature. Because wheat and pasture mingle, the Riverina is fairly closely settled. If there isn't a homestead in sight, there's likely to be a share farmer's house with its pepperina or a hut beside a dam, or at least a fence and a gate, and at night those little squares of yellow light, so significant in the wide country darkness, are scattered far and wide like lonely stars.⁸⁰

Late in the nineteenth century, as the Australian colonies negotiated Federation, and throughout much of the twentieth century, Australians drew upon rural places and imagery to construct shared notions of character and identity. In the 1880s and 1890s, artists like Tom Roberts and Frederick McCubbin painted

⁸⁰ Marjorie Barnard Eldershaw, *My Australia*, Jarrolds, London, 1939, pp. 142-143.



Cunningar railway silos, Harden district, January 2004.

popular images of sunlit paddocks and bustling woolsheds. Roberts, McCubbin, and other landscape artists sought to define and construct nationalistic images. Infatuated with sunlight, they reflected new, optimistic understandings of Australian places. The artists presented nature as relatively kind and amenable—'even the melancholy which flavours the work of McCubbin has an affectionate glow to it', observes cultural historian John Rickard.⁸¹ When Sydney hosted the official celebrations and launch of the Commonwealth of Australia in January 1901, organisers used rural imagery and themes to construct national identity.⁸² A grand procession wound through the city centre. Crowds cheered on Bridge Street as marching soldiers and carriages bearing dignitaries passed under a triumphal arch dedicated to the Australian wool industry. 'Welcome to the Land of the Golden Fleece', the archway read beneath a dome covered in scoured wool. The procession encountered a second arch celebrating the farmers of New South Wales. A model steel plough crowned the structure. A plaster Ceres, Greek goddess of agriculture, emerged from flags and wheat sheaves. 'Ceres welcomes the Commonwealth', an inscription on the archway announced. In the 1950s, historian Russel Ward argued that a distinctly Australian type of character emerged in the nineteenth century from the experiences and culture of rural working men. According to Ward, inland colonisation generated the 'typical Australian', a knockabout bushman known for his mateship and democratic outlook.⁸³

Differences have existed between rural and urban lifestyles ever since the emergence of western agricultural systems and urban development millennia ago. In colonial Australia, and throughout the twentieth century, discourses of rurality manufactured and reinforced notions of difference.⁸⁴ Cultural historian Don Aitkin identifies the rise of an ideology he calls 'countrymindedness' in ru-

⁸¹ John Rickard, *Australia: A cultural history*, Longman, New York, 1992, p. 69.

⁸² J J Keenan, *The Inaugural Celebrations of the Commonwealth of Australia*, NSW Government, Sydney, 1904, pp. 29-37.

⁸³ Russel Ward, *The Australian Legend*, Oxford University Press, Melbourne, 1958, pp. 1-2.

⁸⁴ Perry Share and Geoffrey Lawrence, 'Fear and Loathing in Wagga Wagga: Cultural Representations of the Rural and Possible Policy Implications', *Culture and Policy*, vol. 1, no. 2, www.gu.edu.au/centre/cmp/1_2_05.html, accessed July 2003.

ral Australia during the 1920s and 1930s.⁸⁵ Countrymindedness casts urban lifestyles as degenerate and individualistic. In contrast, farming and grazing are presented as noble pursuits. According to the ideology of countrymindedness, bureaucratic and government interference always threatens the dignity and freedom of rural landholders. As rural sociologists Lisa Bourke and Stewart Lockie observe, the ideology of countrymindedness remains alive outside Australian cities, where the interests of large-scale landholders are often presented as the interests of all rural dwellers.⁸⁶ Countrymindedness constructs a sharp divide between rural and urban interests. Towards the end of the twentieth century, imaginary divides between city and country seemed to widen even further. The cultural, social, and economic rift separating rural and urban dwellers, historian Geoffrey Blainey observed in 2001, 'is wider than at any time in the last 150 years.'⁸⁷ Changing economic factors and migration patterns severed ties between urban and rural domains. At the end of World War Two, almost one third of the Australian population lived in rural areas. Between then and 1970, the proportion of Australians living outside cities halved.⁸⁸ Throughout the following decade, tightening economic constraints and further mechanisation saw forty-five thousand workers and twenty-eight thousand farmers leave agriculture.⁸⁹ In the 1980s and 1990s, rural depopulation continued as industrial farming practices intensified and average farm sizes expanded. International migration packed even more people into coastal cities. With a higher proportion of the population in urban centres, a lower proportion of Australians could easily come to know rural places and people.

In the final decades of the twentieth century, government and business leaders decided to remove tariffs and other devices protecting Australian farmers and farmland from the intense competition of the global marketplace. Urban-based

⁸⁵ Don Aitken, "'Countrymindedness"—the Spread of an Idea', *Australian Cultural History*, no. 4, 1985, pp. 34-40.

⁸⁶ Lisa Bourke and Stewart Lockie, 'Rural Australia: an introduction', in Lockie and Bourke, *Rurality Bites*, pp. 9-10.

⁸⁷ Geoffrey Blainey, 2001 *Boyer Lectures*, 'Lecture 3: The Great Divide', www.abc.net.au/rn/boyers/stories/s420929.htm, accessed January 2004.

⁸⁸ Susan Kelly, 'City Folk, Country Folk: Demographic and Attitudinal Urban-Rural Differences', *Family Matters*, no. 24, August 1989, p. 43.

⁸⁹ Julian Cribb, *The Forgotten Country*, Australian Farm Publications, Melbourne, 1982, p. 7.

decision makers, it seemed to many, abandoned rural people and places. Within governments and the bureaucracy, economic fundamentalism undermined and erased ethical frameworks of care and responsibility.⁹⁰ Most government policies shifted away from an emphasis on social equity, focussing instead on economic efficiency.⁹¹ Transformations in government policy reflected and reinforced national and global patterns of change. Over the same period, urban-based media and advertisers generated negative stereotypes of rural people as unsophisticated and ignorant.⁹² In an increasingly urbanised and competitive world, the derogatory representations implied, rural dwellers did not deserve special attention and support. To help farmland bear the demands of industrial agriculture, governments directed funding to Landcare projects and other remedial schemes. Few people argued that farmland represented anything other than a natural resource for modern agriculture, a successfully competitive global industry. Narrow perceptions of rural terrain as merely productive space banished history and people from farmland. Sandstone ridges in the west and north contain the sprawling city of Sydney. As the twentieth century drew to a close, rural and urban people of New South Wales began to use the term 'Sandstone Curtain' to describe perceptions of a deepening divide between city and country.⁹³

In recent years, rural and urban responses to mounting scientific evidence of ecological decline in rural areas have intensified the sense of separation. Sociologists Geoffrey Lawrence and Ian Gray describe a change in urban attitudes towards rural landholders over the past few decades.⁹⁴ No longer are the energetic efforts of farmers to harness land and produce food and fibre in a variable

⁹⁰ Jane Kelsey, *Economic Fundamentalism*, Pluto Press, London, 1995.

⁹¹ Matthew Tonts, 'The Restructuring of Australia's Rural Communities', in Pritchard and McManus, *Land of Discontent*, p. 53.

⁹² Bourke and Lockie, 'Rural Australia', p. 8.

⁹³ Chris Sidoti, 'Human rights in regional, rural and remote Australia', address presented to the South Australian State Conference of the Country Women's Association, Peterborough, 24 September 1998,

www.hreoc.gov.au/speeches/human_rights/regional_rural_remote_australia.html, accessed February 2004; and Bev Smiles, 'Helping to cross the 'Sandstone Curtain'', *National Parks Journal*, vol. 46, no. 4, August 2002, www.npansw.org.au/journal/200208/focal.htm, accessed February 2004.

⁹⁴ Geoffrey Lawrence and Ian Gray 'The Myths of Modern Agriculture: Australian Rural Production in the 21st Century', in Pritchard and McManus, *Land of Discontent*, pp. 36-37.

climate honoured by many city dwellers. Instead, the sociologists observe, people tend to blame farmers for land degradation. Perhaps few urban dwellers understand the historical and cultural context to the ecological disordering of rural places, or accept the implication of urban consumption and national export policies in destructive patterns of primary production. Simplistic responses from urban people to ecological disorder reinforce the Sandstone Curtain. Rural dwellers also have actively intensified a misguided sense of divided interests. As environmental scientists and lobbyists push for modifications to agricultural systems, rural interest groups demand recognition of the unique constraints of farming. Landholders claim exclusive decision making and property rights over farmland, and call for these rights to be enshrined in legislation.⁹⁵ Claiming a special, exclusive position for rural landholders, farming groups undermine what sense remains of a commonality of interests between rural and urban sectors. In a recent newspaper advertisement, the NSW Farmers Association issued a 'Call to Arms', rousing farmers to oppose 'misleading claims by extreme 'green' groups in the city media'.⁹⁶ The organisation represents debates over rural ecological problems as a clash of separate interests: 'To counter these claims head on, the Association is collecting data to tell the real story—that farmers are responsible custodians of the land, practising environmentally sustainable farming methods.' In the inflammatory advertisement, NSW Farmers appears to deny scientific evidence of ecological disorder. Institutional structures forcing farm business managers to put short-term economic demands before the longer-term ecological needs of rural places are likewise ignored. Instead of seeking opportunities to work with urban groups towards structural changes and ecological regeneration, farming interest groups seek concessions by widening the rift between city and country.

In the nineteenth and early twentieth centuries, Australians honoured rural settlers as nation builders. Noble 'pioneers' took risks to secure and develop grazing and farming land not for personal gain, the legend went, but for the greater

⁹⁵ National Farmers' Federation, *Property Rights Position Paper*, May 2002, www.nff.org.au/pages/sub/NFF%20Property%20Right%20Position.pdf, accessed June 2003.

⁹⁶ NSW Farmers Association, 'NSW Farmers Association in focus', *Land*, 17 July 2003.

good.⁹⁷ By the 1950s, the European conquest of Australia was complete. Rural people and places were no longer seen as central to national identity. Australians looked beyond farmland to other terrains for definition of nation and self. Popular culture reflected and helped construct new understandings of rural land and national identity.⁹⁸ In the past, popular films like *The Squatter's Daughter* (1910) and *On Our Selection* (1932) represented rural Australia as habitable and productive, a resource for national prosperity and identity. Later in the twentieth century, *Wake in Fright* (1971), *Picnic at Hanging Rock* (1975), *The Adventures of Priscilla: Queen of the Desert* (1994), and other celebrated films cast rural places as strange and malevolent. In search of connection with nature and a new version of national identity, Australians turned away from farmland and towards regions relatively untouched by industrial society. In 1983, the Australian electorate voted Bob Hawke into power, partly because the Labor leader promised to save a forested valley of Tasmanian 'wilderness'. He forced the Tasmanian Government to abandon the construction of a hydro-electric dam that would have drowned the rugged Franklin River valley. Displays of national symbolism during the 2000 Olympic Games in Sydney demonstrated the popular association of desert and coastal environments with Australian identity. The passage of the Olympic torch across the continent began in the central Australian desert at Uluru, a place enclosed within a national park and often presented as the symbolic heart of the nation. At the opening ceremony, more than five hundred performers presented 'Deep Sea Dreaming'. The elaborate aerial performance recognised a national 'love affair with the ocean', the organising committee explained.⁹⁹

Shifts in popular notions of national identity are bound to the postwar ecological and social decline of rural Australia in complex ways. In the 1980s and 1990s, negative representations of rural places and people enabled the implementation of destructive economic and social policies. Rural domains became the subordinated, hyper-separated 'Other' to powerful, urban-based interests.

⁹⁷ Hirst, 'The Pioneer Legend'.

⁹⁸ Pritchard and McManus, *Land of Discontent*, p. 9.

⁹⁹ Sydney Organising Committee for the Olympic Games, *Opening Ceremony of the Games of the XXVII Olympiad in Sydney*, Ultimo, 2000, p. 23.

Today, the Sandstone Curtain obscures the unfortunate consequences of modern food and fibre production and marketing systems. If urban people no longer care for and identify with rural places and people, and instead yearn for connection with desert, coastal, and mountain scenery, they may consciously or unconsciously make choices that undermine the wellbeing of rural Australia. Food and natural fibre consumption practices reflect a culture of urban disconnection from agricultural areas. Food packaging sometimes indicates a product is 'Australian made', yet rarely tells exactly where the ingredients are grown. Likewise, marketers tend not to reveal the identities of individual food producers, instead collectively casting them as a homogenous 'Other'. Consumers may telephone corporate information lines, or visit company websites, but they are unlikely to learn the particular origins of food products from these information sources. Consumer ignorance benefits the corporatised food industry. Supermarket companies encourage consumers to seek only product quality and lower prices, primary concerns reinforced by advertising. When a sharp divide exists between city and country, urban consumers cannot come to know and care for particular rural places and people. Food product manufacturers can shop around for the cheapest ingredients. To compete with other producers, farmers must push farmland hard. In *Fatal Harvest: The Tragedy of Industrial Agriculture*, farmer Wendell Berry describes an unfortunate dynamic of economics, ignorance, and destruction:

The global economy institutionalises a global ignorance, in which producers and consumers cannot know or care about one another and in which the histories of all products will be lost. In such a circumstance, the degradation of products and places, producers and consumers is inevitable.¹⁰⁰

In his poem 'Sydney and the Bush', Les Murray charts a shift in the consciousness of Sydney dwellers away from rural people and land.¹⁰¹ By the late twentieth century, Murray observes, a vast imaginative divide lay between the coastal

¹⁰⁰ Wendell Berry, 'The Whole Horse: The Preservation of the Agrarian Mind', in Kimbrell, *Fatal Harvest*, p. 11.

¹⁰¹ Les A Murray, *The Vernacular Republic: Poems 1961-1983*, Angus and Robertson, North Ryde, 1988, p. 104.

city and its rural hinterland. At the onset of British colonisation, there was only 'the Bush', an endless and uniform terrain beyond the new place of Sydney. Settlers erased natural patterns to secure land for a town:

When Sydney and the Bush first met
there was no open ground
and men and girls, in chains and not,
all made an urgent sound.

Then convicts bled and warders bred,
the Bush went back and back,
the men of Fire and of Earth
became White men and Black.

During the nationalist period of 'the bushman' in the late nineteenth and early twentieth centuries, Sydney residents held relatively close relations with rural people and places, Murray feels. Rural and urban cultures interacted in mutually beneficial ways:

When Sydney ordered lavish books
and warmed her feet with coal
the Bush came skylarking to town
and gave poor folk a soul.

Later in the twentieth century, as people left rural Australia and Sydney swelled with overseas migrants, a divide grew in New South Wales between country and city domains. Urban life became one of alienation and restriction:

Then bushmen sank and factories rose
and warders set the tone—
the Bush, in quarter-acre blocks,
helped families hold their own.

Murray describes a sense of extreme separation between urban and rural domains as the twentieth century approached its end. Sydney residents now saw themselves as completely divorced from outlying rural areas:

When Sydney and the Bush meet now
there is antipathy
and fashionable suburbs float
at night, far out to sea.

Urban discourses helped construct the Sandstone Curtain. To maintain a powerful position, Les Murray suggests, Sydney residents ridicule country dwellers, those 'Australians' representing the subordinated and anonymous 'Bush', the placeless rural 'Other' to the urban centre:

When Sydney rules without the Bush
she is a warders' shop
with heavy dancing overhead
the music will not stop

and when the drummers want a laugh
Australians are sent up.
When Sydney and the Bush meet now
there is no common ground.

Like the Sandstone Curtain, a product of oppositional discourse, the image presented by Les Murray of 'fashionable suburbs' floating 'far out to sea' speaks of sharp cultural divides between rural and urban people and places. Modern systems of food production breed ignorance of the intimate physical ties binding the bodies of urban consumers to rural places. Without knowledge of and care for farmland and rural people, urban dwellers may comfortably evade ethical obligations to reciprocate the nourishment and wellbeing rural places provide them. Awareness and critique of industrial systems of farming and the wider cultural and economic contexts of modern agriculture is blocked. Instead, the contribution of primary production to export trade and economic activity tends to be uncritically honoured. In earlier times, 'the Bush came skylarking into

town and gave poor folk a soul', Les Murray writes. The imaginary Sandstone Curtain may impose significant costs indeed.



The Muttama valley runs southeast from Cootamundra towards Coolac village and the Murrumbidgee River. Steep grassy hillsides meet creek flats where cattle graze lucerne pasture. Yellow box trees find nourishment beneath the rich floodplain. Sturdy river red gums shade the channel of Muttama Creek. Irish migrant Francis Taaffe established Muttama squatting run in the early 1830s.¹⁰² Taaffe regularly journeyed south to Melbourne with mobs of cattle for sale. He also ran sheep on Muttama, shipping the annual clip to English markets. According to James Gormly, whose father was an old friend of the Muttama squatter, Taaffe acted with justice and humanity towards local Wiradjuri people. He gave generous amounts of food to Wiradjuri camped on the station.¹⁰³ Records suggest violent encounters took place on neighbouring squatting runs upstream from Muttama, in the Cootamundra and Stockinbingal districts. Perhaps Taaffe offered Wiradjuri families and individuals rare protection and refuge on Muttama station.

James Gormly recorded stirring tales of squatting life on the inland slopes. He described one journey to Melbourne made by Francis Taaffe and several stockmen with a mob of cattle in 1838.¹⁰⁴ Along the way, the men learned of the slaughter of at least eight stockmen beside the Broken River southwest of Albury, where pastoralists were attempting to secure land from local Aboriginal clans.¹⁰⁵ After the cattle sale, safe in Melbourne, Taaffe's workers refused to make the dangerous trek home. The squatter departed on Barebones, his thoroughbred horse. As settlers abandoned stations throughout the Broken River

¹⁰² Gormly, *Exploration and Settlement in Australia*, pp. 163-164.

¹⁰³ Gormly, 'Early Days in this District'.

¹⁰⁴ Gormly, *Exploration and Settlement in Australia*, pp. 164-166.

¹⁰⁵ Alan Atkinson and Marian Aveling (eds), *Australians 1838*, Fairfax, Syme and Weldon, Broadway, 1987, pp. 48-50.

region, Taaffe avoided the main northern road and spurred his horse through the bush. He urged Barebones to swim river channels with speed. Each night the squatter walked to rest his weary horse. The pair reached Muttama station in just four days. Overwhelmed with gratitude, Taaffe never saddled Barebones again. Years later, Gormly saw the old horse grazing contently in a paddock beside Muttama homestead.¹⁰⁶

Francis Taaffe spent several prosperous decades at Muttama before he sold out and returned to Ireland. In 1886, the opening of a railway line down the Muttama valley from Cootamundra to Gundagai sparked the growth of Muttama village, just upstream from the old homestead.¹⁰⁷ The village expanded after World War One when the New South Wales Government split Muttama station into fifteen small farms for returned soldiers and their families.¹⁰⁸ Rene Bergeson came to Muttama in 1930 to begin her first teaching appointment. The eighteen-year-old found a socially active settlement. Young people met regularly for tennis matches and dances. Muttama was a substantial business centre, Bergeson remembered:

There was the Post Office, a general store, hall, tennis courts, Catholic and Church of England Churches. Also there were local saleyards and Mr Donaghue, the Auctioneer. He possessed quite a number of horses, and wasn't averse to lending me one quite often.

Most of the parents were very friendly and asked me to their homes for a night or a weekend. So I'd ride home with the child or children. All of this I enjoyed.¹⁰⁹

Rene Bergeson developed a firm friendship with Joyce Rumble, a Muttama student only a few years younger. Joyce eventually married fellow student Tom McMahon. After Rene left the district, she returned each year to spend a week

¹⁰⁶ Gormly, 'Early Days in this District'.

¹⁰⁷ NSW Department of Lands, 'Village of Muttama and Suburban Lands', third edition, 1952, National Library of Australia, map collection.

¹⁰⁸ Tom McMahon, telephone conversation, 25 June 2003.

¹⁰⁹ Rene Bergeson, *Spanning the Years*, privately published, Leeton, 1985, p. 27.



Muttama Hall, March 2002.

on Newinga, the McMahon family farm just south of Muttama. Today, Tom and Joyce McMahon enthusiastically maintain the traditions of hospitality they grew up with. 'I never let people leave without having had a cup of tea', Joyce told me. We sit in the kitchen when I visit. Joyce carefully arranges plates of sandwiches and cakes across a needlework tablecloth. Tom and Joyce ask after my family. We talk about the great changes in farming practices and rural society they have lived through.

Tom's father Oswald McMahon was a dairy farmer at Picton, near Sydney. The returned World War One soldier purchased a Muttama station block in 1919. Oswald and Madeline McMahon settled on the small farm when Tom was one year old. Clearing was not necessary on Newinga. Big white box trees once grew on the hilltops, Tom learned from old-timers, and yellow box on the flats. Workers ringbarked and pulled down most of the old eucalypts long before the purchase of Muttama station for soldier settlement. They cut up the fallen timber and sent the lengths by train along the Muttama valley to fuel the Cootamundra brickworks. Oswald McMahon knew little about wheat growing. He chose to graze sheep instead. In return for access to Newinga paddocks for wheat growing, a share-farmer split harvest proceeds with the McMahon family. When Tom eventually took over the farm, he grew wheat and oats and ran sheep and cattle. In 1947, he sold his team of eight draught horses and purchased a tractor. Tom and Joyce described the physically demanding nature of earlier farming methods. Joyce's father was a skilled haystack builder. Paddocks of oats were cut and stored in haystacks for processing into chaff to feed horses. On bright December days, as harvesters plied wheat paddocks, men hauled hessian bags heavy with grain onto trucks for transport to the Cootamundra silos. Tom smiled as he told me the hardest job for a farmer today is pulling a lever.¹¹⁰

As children, Joyce remembers, they drove sulkies and rode horses to attend school in Muttama. When she and Tom were students in the early 1930s there were about sixty children enrolled at Muttama school. People had big families.

Tom mentioned one couple who produced eleven children. Catholics and Protestants attended separate churches in Muttama. Proceeds from the annual gymkhana went to the Cootamundra hospital. The local cricket and tennis clubs held regular dances in the village hall. Joyce and other women draped paper streamers across the hall and prepared cakes and sandwiches for supper. The timber floor was rubbed with beeswax to produce a shining, slippery surface for dancing. Petrol lights illuminated the hall. People danced and sang to Parker's Melody Masters, a band from Harden.¹¹¹

'It was a beautiful community', Tom said, 'and now there's only a few of us left.' The soldier settlement blocks on Muttama were too small, Tom explained, and most of the returned soldiers knew little about farming. Many sold out because they could not keep up repayments to the government. Shops and the school closed as roads and cars improved and a school bus service began to Cootamundra. Over the past decade, several corporations have become the largest landholders in the Muttama valley. Tom thinks the corporate owners manage the amalgamated farmland particularly well. They take advice from management consultants and agronomists. Unfortunately, only a handful of corporation employees work across the wide new properties. Many of the homesteads once occupied by McMahon family relations and friends stand empty.

Mechanisation, improved transport, and declining terms of trade drove people from the Muttama valley in the second half of the twentieth century. In part, depopulation was an inevitable outcome of plans to impose a European-style network of small farms. Shifts in national consciousness and priorities undermined alternative possibilities. Popular attention towards rural landscapes waned as the twentieth century closed. No longer was farmland a domain for people, a foundation for stable community and national identity. Instead, the rise of economic fundamentalist ideologies generated dominant perceptions of agricultural land as the material basis to an industrial system of production and

¹¹⁰ Tom and Joyce McMahon, conversation at Newinga, Muttama district, 26 March 2002.

¹¹¹ Joyce McMahon, telephone conversation, 25 June 2003.



Tom and Joyce McMahon, Newinga, Muttama district, April 2002.

export trade. Government policies and economic pressures continue to drive rural depopulation. Modern transport routes and marketing systems push urban consumers further away from sites of primary production. Signifying a cultural process of hyper-separation, the Sandstone Curtain serves powerful economic interests.¹¹² Rural people and places are cast as homogenous components of an inferior and distinctly different 'Other', subordinate to global and urban marketplaces. Urban connections to rural domains are denied, the diverse voices and needs rising beyond cities ignored.

Sacred earth?

On the southwest slopes as summer approaches, eastern snake-necked turtles begin to migrate from creeks and dams in search of new water bodies and nesting sites. Between Harden and Wallendbeen, I once saw a turtle stopped on double white lines in the middle of the road, curled inside its shell as traffic swept down towards and across the bridge over Demondrille Creek. Pulling off the busy road, I waited for a semi-trailer to pass. The frightened creature did not stir in my hands. I left the snake-necked turtle on soft grass beside the waterway.

One spring afternoon several years later, I drove towards south towards Wallendbeen from Young. Cherry orchards gave way to fat lambs and canola. I passed a property sign, 'Crookwood', inscribed in old English lettering. The placename was sadly appropriate. On the other side of the road, sickly yellow box trees and dark tussocks of spike rush stood at the base of a slope in waterlogged, possibly salty soil. On the radio, Aboriginal singer Jimmy Little answered questions. He spoke quietly, with tenderness. His mother was a freshwater woman from Cumeragunga, Jimmy explained, a mission on the Murray River, and his father came from a coastal community. Jimmy took his identity

¹¹² Plumwood, 'Decolonising Relationships with Nature', pp. 10-11.

from his mother's people. A freshwater man, he belonged to the Yorta Yorta tribe, and the snake-necked turtle was his totem. As Jimmy Little spoke with the radio interviewer, I noticed a snake-necked turtle beside the road. I turned back and stopped, planning to carry the animal across the bitumen. Looking down, I saw the turtle was dead. A car tyre had shattered its brown shell. Meat ants hovered, pausing to tear away rotting flesh. As I watched, Jimmy Little began to sing a gentle song from his new album:

Surely God was a lover
When he bade the day begin
Soft as a woman's eyelid
Fine as a woman's skin
Surely God was a lover
All burning with desire
When He called the night to come down
And set the day on fire.¹¹³

Wallendbeen cemetery lies further south from where I found the dead turtle, beyond the southern edge of Wallendbeen village. Inside the cemetery, apple box trees shade marble headstones and kangaroo grass. In 1884, the Department of Lands paid the trustees of Wallendbeen cemetery seventy-five pounds to enclose three hectares beside the railway line.¹¹⁴ Wallendbeen village did not grow into a town as government surveyors had expected. Gravediggers left much of the reserved land alone. Behind a sturdy fence, undisturbed by livestock and ploughs, an array of grassy woodland plants continued to flourish across the fertile slope of deep red earth. Today, Cootamundra Shire Council workers poison plants growing on paths and alongside the graves. Ceramic fragments, broken seashells, and faded synthetic flowers are visible on bared gravel and clay. Headstones face east to receive the rising sun, a Christian symbol of resurrection and eternal life beyond the earth. One memorial marks the grave of Samuel Hollis, who died in 1893 aged fifty-nine. 'Far Beyond This World of Changes', his epitaph reads,

¹¹³ Jimmy Little, 'Surely God is a lover', *Resonate*, Festival Mushroom Records, 2000.

¹¹⁴ 'Wallendbeen Cemetery', *Cootamundra Herald*, 26 November 1884.

Far Beyond This World of Care,
We Shall Find Our Missing Loved Ones
In Our Father's Mansion Fair.

Another headstone memorialises William Palmer, buried in June 1916. According to his epitaph inscribed on granite, heaven above is 'blessed', an 'everlasting home of peace and love.' By implication, earth is cursed, a transient place of violence and hatred. Christians of recent centuries considered earth not a nourishing domain, explains environmental historian Roderick Nash, 'but a kind of halfway house of trial and testing from which one was released at death.'¹¹⁵ Christians locate the source of all holiness in an eternal and unchanging heavenly home, a sacred domain beyond the dynamic, shifting nature of earthly life and embodied human existence. At Wallendbeen, death granted William Palmer transcendence from hostile terrain, his gravestone tells:

At last when earth's days work is ended
All meet thee in that blessed home above
From whence thou camest where thou hast ascended
Thy everlasting home of peace and love.

Banishing the sacred from earthly places dissolved moral constraints over human use of land and other species. Indeed, it was the moral duty of Christians to rearrange and simplify local ecologies. When Eve showed Adam how to pick fruit from the Tree of the Knowledge of Good and Evil, the biblical story goes, God expelled the couple from the bountiful Garden of Eden into the desert.¹¹⁶ According to the dominant religious narrative of western culture, intense agricultural labour, performed by men, recreates an inferior version of the lost Garden of Eden. Christian teachings brim with agricultural instructions and metaphors. 'He that tilleth his land shall have plenty of bread: but he that followeth

¹¹⁵ Roderick Frazier Nash, *The Rights of Nature: A History of Environmental Ethics*, Primavera Press, Leichhardt, 1990, p. 91.

¹¹⁶ Carolyn Merchant, 'Reinventing Eden: Western Culture as a Recovery Narrative', in William Cronon (ed.), *Uncommon Ground: Towards Reinventing Nature*, WW Norton & Co., New York, 1995, p. 133.

after vain persons shall have poverty enough', one proverb declares in the King James version of the *Holy Bible*.¹¹⁷ Christ is the sacrificial Lamb of God, wheaten bread symbolic of his flesh.

In the 1880s, Australian inventor and industrialist HV McKay developed the Sunshine Harvester, a labour-saving device able to strip, thresh, and winnow wheat in one operation.¹¹⁸ McKay apparently named the popular invention 'Sunshine' after attending a Christian sermon in Ballarat, a regional centre west of Melbourne. The religion of God 'was all sunshine', McKay learned from the preacher, 'and the only difference between earth and heaven was that the sunshine of earth sometimes got overclouded, whilst that of heaven's was everlasting.'¹¹⁹ The new harvesting machine promised to bring the sunshine of God to the wheat paddocks and dark bushland of Australia. A device to make farming easier, the Sunshine Harvester helped settlers recreate the lost Garden of Eden.

Medieval historian Lynn White Jr famously described western Christianity as 'the most anthropocentric religion the world has seen.'¹²⁰ For nearly two thousand years, Christian missionaries cut down sacred groves in which others saw 'spirit in nature', White noted in his influential analysis of Genesis first published in 1967. Christianity established a dangerous dualism between 'man and nature'. Christians imagined themselves as divorced from and superior to nature, argued White, a domain over which God willed them to rule. Many theologians challenged the arguments presented by Lynn White. Chapters in the Christian bible other than Genesis, some argued, encouraged careful 'stewardship' of all the plants and animals created by God.¹²¹

Despite possibilities of alternative readings, the most influential interpretations of Christian texts in recent centuries cast humanity in firm control over the rest

¹¹⁷ Proverbs, 28: 19, *Holy Bible*, King James version, Oxford University Press, no date, p. 747.

¹¹⁸ Vance Palmer, *National Portraits*, Angus and Robertson, Sydney, 1940, pp. 197-198.

¹¹⁹ F J Kendall, 'H. V. McKay', Grain Handling Authority of NSW, *Bulk Wheat Year Book*, 1984, p. 67.

¹²⁰ Lynn White Jr, 'The Historical Roots of Our Ecologic Crisis', *Science*, vol. 155, 1967, pp. 1203-1207.



Memorial window inside St Luke's Anglican Church, June, 2002.

of nature. Genesis informed the work of seventeenth century philosopher John Locke, an influential apologist for British colonisation. According to Locke, colonists following the biblical order to 'subdue the Earth' held moral and legal rights to terrain they secured and farmed. 'He that in Obedience to this Command of God,' wrote Locke, 'subdued, tilled and sowed any part of it, thereby annexed to it something that was his *Property*, which another had no Title to, nor could without injury take from him.'¹²² In Australia, a continent without a familiar English matrix of farmland and villages, dominant Christian ideas helped justify colonisation and Aboriginal dispossession. Aborigines never cultivated land, colonists asserted, and thereby did not own it. In the middle of the nineteenth century, the same paradigm lent righteousness and religiosity to the push for agricultural development and closer settlement across the inland pastoral estates of squatters.

In February 1971, my parents drove my two-year old sister and me, a baby, past wheat paddocks recently harvested to an Anglican church on a Junee hillside. Inside the redbrick building, a priest baptised me into the Christian faith. I returned to the church one autumn afternoon more than thirty years later, carrying my certificate of baptism. 'We print the Cross upon thee here', the baptism card declares, 'And stamp thee His alone'. The wording of the certificate set me against earthbound forces and elements, instructing me 'manfully to fight' for Christ 'against sin, the world, and the devil'. Inside the church, my hand felt the veined marble of the baptismal font, cold and clean. Slender windows—stained glass and topped with pointed Gothic arches—drew my attention skyward, away from the place where I stood. Sunlight illuminated windows built into the northern wall. One glowing display of coloured glass showed a woman holding a golden sheaf of ripe wheat. Undulating farmland cloaked in crop extends behind her. 'In Loving Memory of Ethel Jane Ings', a brass plaque reads below the window, 'Faithful Servant of Christ and his Church 1888-1981.'

¹²¹ Peter Hay, *Main Currents in Western Environmental Thought*, UNSW Press, Sydney, 2002, pp. 100-106.

¹²² John Locke, *Two Treatises of Government*, Cambridge University Press, Cambridge, 1960 [1690], p. 309.

The hoot of a freight train rolling into Junee entered the church. I walked outside into warm autumn sun. Bees hovered above the pink blossoms of a flowering gum. From the hillside footpath I gazed towards farmland beyond the domestic gardens and corrugated iron rooftops of Junee. One cultivated paddock of red earth lay in fallow while a farmer waited for autumn rain before sowing. Lining the street, elderly kurrajong trees threw shade over cars parked in front of the church. Across the southwest slopes the previous spring, kurrajongs had carried rampant sprays of creamy flowers streaked red. Now, tree branches held clumps of brown pods heavy with seed. When my grandfather was born north of Junee on Retreat, inside the homestead beside Pinchgut Creek, his parents planted a kurrajong tree in the garden. He suffered various illnesses throughout his life. I remember the syringes he used each day to inject insulin into his thigh. At times when my grandfather became particularly ill, the growing kurrajong sickened too. His family watched the tree in the homestead garden, hoping it and my grandfather would stay healthy and strong, imagining he and the kurrajong linked in some way. Today, the tree is mature and flourishing, a robust memorial. I picked some kurrajong seedpods before returning to my car. Kurrajong seeds roasted in oil are tasty and sweet. Decades ago inside the Junee church, a priest asked a distant, heavenly god to grant me 'power and strength, to have victory, and to triumph against the devil, the world, and the flesh.'¹²³ Enmeshed in an industrial society of western and Christian traditions, can I refuse the power I did not choose? As I drove away into late afternoon light, I pictured my grandfather, red earth, and a sacred, nourishing grove of kurrajong trees.

¹²³ Society for Promoting Christian Knowledge, *The Book of Common Prayer and Administration of the Sacraments*, Cambridge University Press, London, no date, p. 268.



Kurrajong flowers, Cootamundra district, December 2003.

Silence

Unremembered voices

Retreat homestead has a deep, shaded verandah. Scratches across the timber floor—an expanse of white cypress pine felled in a nearby paddock—record generations of activity. At the western end, a door leads into an office. I paused before inserting the key. Sweet perfume rose from beds of violets and jonquils into unusually warm winter air. Beyond the garden fence, sunlight filled a paddock graced by elderly yellow box trees. I sat in an oak chair inside the dark and musty room, facing the roll-top office desk. A framed photograph of stud rams—curled horns and heavy, rolling fleeces—hangs on the wall beside the desk. ‘Kadlunga Stud Merinos, Sept 1912, two of the leading sires’, the caption reads. Beneath red-brown dust, agricultural guidebooks and station records are arranged on shelves. I read a letter sent to my grandfather in 1956 by the Water Conservation and Irrigation Commission, granting approval for the excavation of a dam on Pinchgut Creek. ‘The licensees shall destroy and keep destroyed within the whole of the area covered by the water stored by the dam all aquatic plants’, the letter insists. Chrome-plated veterinary equipment sits near an old scrapbook. Pasted inside, a newspaper cutting from November 1924 announces ‘Another Sydney Record’:

At Tuesday’s wool sales the Co-operative Wool and Produce Co. Ltd. included in its catalogue the well-known Retreat wool, on account of Messrs. G. and H. Main, Retreat, Illabo. The top line of comeback, consisting of 5 bales marked

SCB, realised 40½ d, which is a record for the Sydney market. This wool was a stylish and well-grown lot, well nourished, and of even quality throughout.¹

On another shelf I found a yellowed booklet issued by the Graziers' Association of New South Wales: *1933 Award for Shearing, Crutching and Wool-Scouring Operations and for Station Hands*. In the early 1930s, as the world economy fell into depression, Australian station managers learned the Commonwealth Court of Conciliation and Arbitration had categorised Aboriginal employees separately from other workers in the pastoral industry:

The definition of "Station Hand" under the 1932 Award has been altered to exclude aborigines, who are consequently not entitled to receive Award wages. Their engagement is, therefore, a matter of mutual agreement and subject only to any special requirements of State legislation, such as the Aborigines' Protection Acts.²

Another newspaper cutting in the scrapbook caught my attention. 'Mr F. H. Weston, well known as manager for many years of Kadlunga Sheep Stud, Mintaro, has returned from a visit to New South Wales, and on Friday he gave some interesting impressions of his trip', begins the article from a 1926 edition of a South Australian newspaper.³ Fred Weston, my grandfather's grandfather, stayed here at Retreat, west of Cootamundra, with his daughter and son-in-law. 'Originally it was rather thickly timbered with box gum and pine', the journalist wrote of Retreat after speaking with Weston. 'It has been mostly cleared, but there is still a good deal of good pine and some gum timber left.' During his stay on the southwest slopes, the respected South Australian sheep breeder visited Widgeon Gully, a grazing station on the Murrumbidgee River near Coolac:

Widgeon Gully is a beautiful property of some 10, 000 acres, with a wide frontage to the Murrumbidgee. The river flats have a rich alluvial soil well suited to

¹ 'Wool Sales', *Sydney Morning Herald*, 20 November 1924, Retreat office scrapbook.

² Commonwealth Court of Conciliation and Arbitration, *1933 Award for Shearing, Crutching and Wool-Scouring Operations and for Station Hands*, Graziers' Association of New South Wales, Sydney, 1933, p. 23.

lucerne. Although only planted two years ago a wonderfully good cut had just been baled and carted. Three weeks later the plant was fully 12 in. high, and promised to give a good second cut, notwithstanding that there has been no rain there for a considerable time. It is exceptionally dry. On one portion of the run, where two wethers to the acre have been running for upwards of 12 months, there is still an abundance of feed, and the wethers prime fat.⁴

The newspaper published a photograph alongside the article. In his mid-seventies, Fred Weston looks old. He stands beside an Aboriginal man, roughly the same age. 'Mr. F. H. Weston and "Marvellous," one of the last of the Murrumbidgee natives, who goes from station to station', the caption reads. John Noble, nicknamed Marvellous, was a Wiradjuri man widely known across the Riverina and southern tablelands. Margaret Tucker, born beside the Murrumbidgee River on Warangesda mission near Darlington Point, remembered her grandmother's brother, 'Grandfather Noble', with great warmth. John Noble's nickname, Tucker explained, came from his habit of saying 'Ain't that marvellous?' at the end of each sentence.⁵ Noble was renowned for undertaking long journeys. He was related to Bob Glanville's grandmother, Melinda McGuinness.⁶ When Bob's mother was a young girl, it always amazed her how the old man arrived in a clean white shirt after travelling swiftly on foot from afar. Noble would appear at the Cootamundra show to throw boomerangs and entertain the crowd.⁷

When John Noble became sick and died in 1928, one newspaper claimed he was over a century old.⁸ Other reports said eighty years or more.⁹ According to the *Cootamundra Daily Herald*, Noble was born on Muttama station.¹⁰ Muttama squatter Francis Taaffe had a reputation for acting with generosity and compas-

³ 'The Man on the Land. Stations in the Mother State. Mr. F. H. Weston's Visit', unidentified newspaper, 27 February 1926, Retreat office scrapbook.

⁴ Unidentified newspaper, 27 February 1926, Retreat office scrapbook.

⁵ Tucker, *If Everyone Cared*, p. 31.

⁶ Bob Glanville, conversation at Treetops, Cootamundra district, 10 February 2001.

⁷ Bob Glanville, telephone conversation, 26 February 2003.

⁸ 'Old Aboriginal Ill', *Sydney Morning Herald*, 14 March 1928.

⁹ 'Marvellous is Ill', *Yass Courier*, 12 March 1928; and 'Obituary', *Cootamundra Daily Herald*, 28 March 1928.

¹⁰ *Cootamundra Daily Herald*, 28 March 1928.

sion towards Wiradjuri people.¹¹ Reports exist of violent conflict between local clanspeople and squatters north of Muttama, around Cootamundra and Wallendbeen, in the 1830s, about the time John Noble was probably born. Perhaps Taaffe offered refuge to Noble's mother and her people. On the southwest slopes, after an initial period of conflict and accommodation, Wiradjuri survivors lived relatively independently of squatters.¹² In the 1850s and 1860s, Noble probably took part in ceremonies and fulfilled cultural obligations towards particular places and other species. In the final decades of the nineteenth century, the extension of the Great Southern Railway and the ensuing intensification of agricultural settlement transformed the region. Wiradjuri were unable to maintain customary lifeways as towns grew, farmland spread, and diverse communities of grassy woodland plants and animals vanished. Mary Gilmore described a final gathering of three hundred Wiradjuri northwest of Stockinbingal on the Bland Creek in about 1879, an event John Noble may have attended:

It was only half the number expected, as those from the Lachlan could not get across in time, owing to drought. It was held at Morangarell, the home of my father's cousins, the McGregors. There I saw the last Gundagai chief. The blacks had called the meeting of the localised tribes, expecting and knowing it would be the last they would ever hold.¹³

In 1916, legislative changes granted the Aborigines Protection Board powers to make decisions for Aboriginal children without parental consent or court order.¹⁴ The Board advised the matron of Cootamundra Aboriginal Girls Training Home, established four years earlier, to expect a sudden inflow. 'I cannot forget any detail of that moment, it stands out as though it was yesterday', Margaret Tucker wrote of the time she was removed from her family and sent to the Girls Home at Cootamundra. One weekday in 1917, a policeman came to the school on Moonahculla mission, near Deniliquin southwest of Wagga, to collect Margaret, her sister May, and another girl. Mission residents gathered outside the schoolroom door, Tucker remembered,

¹¹ Gormly, 'Early Days in this District'.

¹² See 'Securing the land', Chapter One.

¹³ Gilmore, *Old Days: Old Ways*, p. 138.

all talking at once, some in the language, some in English, but all with a hopelessness, knowing they would not have the last say. Some looked angry, others had tears running down their cheeks.¹⁵

The schoolmistress, hoping to stop the removal, sent two boys to alert Theresa Clements, mother of Margaret and May, who worked at a nearby homestead. Theresa ran to the mission school without pausing to remove her apron. The policeman threatened to handcuff her when she insisted that her children stay. Theresa accompanied the girls to Deniliquin. Inside the police station, begging for the decision to be reversed, Theresa Clements heard the car engine start and rushed out. 'My last memory of her for many years was her waving pathetically', wrote Margaret Tucker, 'as we waved back and called out goodbye to her, but we were too far away for her to hear us.' Relatives found Theresa the next day, collapsed under a roadside tree, distraught.¹⁶

Margaret Tucker remembered John Noble's great affection for her mother and the mission children. They reciprocated his love:

My memory of this lovable old man was his kindness to us children and my mother, of whom he was very fond. He was my grandmother Bedgie's brother. Some children in those days felt he was a Witch Doctor. Mother and we children loved the old man, because he was good, although a bit cunning. He was very generous and would share his food with anyone. He loved his booze, and my father would scold him about this.¹⁷

Between pages in the Retreat scrapbook I found a photograph fixed to a card, the same image published with the newspaper report of Fred Weston's trip. 'Taken at Widgeon Gully N.S.W.', someone had noted on the card in black ink. I lifted the image into daylight spilling through the office doorway. The two grey-haired men stand closely, Weston slightly behind. Perhaps the photogra-

¹⁴ Read, *A Hundred Years War*, p. 64.

¹⁵ Tucker, *If Everyone Cared*, p. 91.

¹⁶ Tucker, *If Everyone Cared*, pp. 93-94.

¹⁷ Tucker, *If Everyone Cared*, p. 31.

pher captured the image in the garden beside Widgeon Gully homestead. Dappled shade falls across the shoulders of the elderly pair. Shorter of the two, Noble is dressed informally—his trousers creased, shirtsleeves rolled, and collar open. Fred Weston is neatly attired and somewhat rotund, his right hand loosely supporting a pipe. The visiting sheep breeder appears content, settled. John Noble's eyes are sharper, his body lean, lips pressed. The Wiradjuri elder holds his arms close to his body, and clenches his fists.



Wallendbeen cemetery is a rare island of biological diversity in a sea of monocultural farmland and pasture paddocks.¹⁸ Beside the graves, spring sunshine and warmth brings forth a colourful and sensuous display. Yellow blossoms of buttercups (*Ranunculus lappaceus*) and yam daisies rise amid tussocks of kangaroo and snow grass turned grey by winter frosts. Purple flowers of chocolate lilies exude a delicious aroma into warm spring air. I drove into the cemetery early one spring. Drawn by the new season, fresh green blades emerged through weathered tufts of kangaroo grass. Beneath red gum and apple box trees, hundreds of billy button (*Craspedia variabilis*) flowers—each a single golden globe on a tall stem—hovered above the grassy surface like a miniature, earthbound galaxy. On the other side of the fence, a wheat paddock extended southward. Frogs called from cumbungi downhill, where cattle hooves sank into swampland. The Cootamundra Shire Council signed a Voluntary Conservation Agreement with the New South Wales Minister for the Environment in 2001 to protect the tiny remnant of grassy woodland inside Wallendbeen cemetery.¹⁹ The *Plan of Management* lists fifty-two native plant species encountered by botanists inside the cemetery fence. Long and diverse, the list indicates the extraordinary biological, historical, and cultural significance of the site.²⁰

¹⁸ See 'Sacred earth?', Chapter Four.

¹⁹ 'New Partnerships Formed', *Woodland Wanderings*, vol. 1, issue 2, spring 2001.

²⁰ S T Godbee, *Plan of Management for Lands Subject to a Voluntary Conservation Agreement between the Minister for the Environment of the State of New South Wales and Cootamundra Shire Council*, Cootamundra Shire Council, Cootamundra, 2001, pp. 17-18.



Fred Weston and John Noble, Widgeon Gully, Coolac district, 1926.

'The voice with which nature speaks is tactile, sensual, auditory, odoriferous, and visual', writes environmental historian Carolyn Merchant, 'a visceral understanding communicated through our hearts into our minds.'²¹ As plants germinate and grow, they express a lively genetic inheritance, a vibrant 'will to flourish'.²² Before colonisation, grassy white box woodlands cloaked most of the southwest slopes. According to ecologists Suzanne Prober and Kevin Thiele, less than 0.01 percent of the region's grassy white box woodlands remain in a biologically diverse and healthy condition.²³ In 1968, anthropologist WEH Stanner called the denial by settler Australians of violent frontier encounters with Aborigines 'the Great Australian Silence'.²⁴ Tom Griffiths suggests the Great Australian Silence was often 'white noise', historical narratives 'obscuring and overlaying' memories of atrocities. Denial of violence 'was frequently unconscious, or only half-conscious', writes Griffiths, 'for it was part of a genuine attempt by white Australians to foster emotional possession of the land'.²⁵ Likewise, settlers on the southwest slopes constructed loud narratives to fill empty silences imposed by ecological erasure, and make claims over land. Downhill from Wallendbeen cemetery, beside a busy intersection, prominent cement and acrylic sculptures honour the economic and productive success of the local wheat industry.²⁶ The public artwork elevates onto a pedestal the modern, industrial model of monocultural wheat production. Production and profit are identified as primary local concerns. Attention is drawn to the food, industry, and export dollars rising here. Only simple, comfortable messages are offered by the sculptures on the outskirts of Wallendbeen village. Social and ecological burdens imposed by industrial wheat production across time are ignored. No references are made to dying eucalypts in nearby paddocks, to Wiradjuri dis-

²¹ Carolyn Merchant, *Reinventing Eden: The Fate of Nature in Western Culture*, Routledge, New York, 2003, p. 227.

²² Deborah Rose, 'Connecting with ecological futures', Position paper prepared for The National Humanities and Social Sciences Summit, 26-27 July 2001, Canberra, <http://cres.anu.edu.au/publications/cef.pdf>, accessed November 2003, p. 11.

²³ Suzanne Prober and Kevin Thiele, 'Surviving in Cemeteries—the Grassy White Box Woodlands', *National Parks Journal*, February 1993, p. 13.

²⁴ WEH Stanner, quoted in Tom Griffiths, *Hunters and Collectors: The Antiquarian Imagination in Australia*, Cambridge University Press, Cambridge, 1996, p. 4.

²⁵ Griffiths, *Hunters and Collectors*, p. 4.

²⁶ See 'Demanding production', Chapter Two.

possession, to displacement of rural families by mechanisation and global competition. Events of the past are not linked to the present. Attention is directed towards a promising future of production and economic activity, and away from obligations to history and place. Processes of silencing are justified by the public artwork, the dominant industrial order bolstered.²⁷ Rising above surrounding parkland, the sculptures stand like trophies erected by the winners of a scramble for economic security and profit.

In her poem 'Primeval Australia', Mary Gilmore called for remembrance of 'All that has vanished with the far-off summers.'²⁸ Since the beginning of colonisation, violent actions had silenced 'multitudinous voices chirping to the sky'. She described the displacement of the emu, 'a king of birds', by 'spreading herds' and 'great cities'. Gilmore pleaded, 'O Memory, tell of him to later comers, Lest he go unremembered with his summers!' Unremembering involves a deliberate process of forgetting. Perhaps Gilmore observed settlers turning away from the fragmentation and wounds colonial processes imposed. Voices of the recently dead, especially when denied and forgotten, cannot easily rise to disturb and make claims on the present. Gilmore did not seek comfortable solitude:

Once all the whole year through the happy bush was loud;
And, O the singing and the chatter after rain!
Now on the plains the grass is like an empty shroud;
The woods are silent, for the hand of man has slain:
And you will never know, you later comers,
What we, who pass, knew in the old far summers!

Powerful beliefs brought silences to rural Australia. 'A weed is a plant growing where it is not wanted', explained the authors of *Weeds: An illustrated botanical guide to the weeds of Australia*, published by the New South Wales Department of Agriculture in 1987.²⁹ Representation of many plants native to rural places as useless and dangerous justified the establishment of crop monocultures and

²⁷ Plumwood, *Environmental Culture*, p. 20.

²⁸ Gilmore, *The Passionate Heart*, pp. 70-72.



Flowering billy buttons, Wallendbeen cemetery, September 2001.

simple pastures of several introduced species. Agricultural scientists categorised as obstacles to production a range of plants Aborigines and some early settlers in southeast Australia considered useful.³⁰ The weeds guidebook published by the Department of Agriculture classes as problematic many species from which Aborigines harvested food, including cumbungi, warrigal greens (*Tetragonia tetragoniodes*), *Dianella* spp., tall spike rush (*Eleocharis sphacelata*), bulbine lily (**galagang**, *Bulbine bulbosa*), nardoo (**ngarru**, *Marsilea drummondii*), and kangaroo apples (*Solanum aviculare*).³¹ On the southwest slopes, the development of export-oriented agriculture required elimination of both Wiradjuri people and indigenous communities of plants and animals. Imperial imperatives and global markets determined what plants were classed as weeds. Strategies to deliver standard products to distant markets depended on emotional and cultural distance from local species and Wiradjuri people. Intimacy threatened the colonial project to harness the land.

Joseph Maiden, Curator of the Technological Museum of New South Wales in Sydney, published *The Useful Native Plants of Australia* in 1889.³² He described valuable attributes of many species disappearing across inland regions as farmland spread. *Dodonaea* spp., or 'Native Hops', made 'beer of excellent quality'.³³ The blossom of golden wattle (*Acacia pycnantha*), now Australia's floral emblem, offered a sweet perfume, Maiden noted, a sample of which was exhibited at the 1886 Colonial and Indian Exhibition in London.³⁴ And golden wattle bark was one of the richest sources of tannin known in the world.³⁵ 'Flax Lily' (*Dianella longifolia*) offered strong, silky fibres used by Aborigines to make baskets.³⁶ The reddish, mottled timber of drooping she-oak, Joseph Maiden explained, made lovely furniture. As burning wood, drooping she-oak was unsurpassed.³⁷ Weep-

²⁹ B A Auld and R W Medd, *Weeds: An illustrated botanical guide to the weeds of Australia*, Department of Agriculture New South Wales, Sydney, 1987, p. 1.

³⁰ Low, *Wild Food Plants of Australia*.

³¹ Low, *Wild Food Plants of Australia*.

³² Joseph H Maiden, *The Useful Native Plants of Australia (including Tasmania)*, Compendium, Melbourne, 1975 [1889].

³³ Maiden, *The Useful Native Plants of Australia*, p. 23.

³⁴ Maiden, *The Useful Native Plants of Australia*, p. 290.

³⁵ Maiden, *The Useful Native Plants of Australia*, p. 312.

³⁶ Maiden, *The Useful Native Plants of Australia*, p. 621.

³⁷ Maiden, *The Useful Native Plants of Australia*, p. 399.

ing myall, also known as boree (**buuri**, *Acacia pendula*), a graceful small tree with pendulous branches, grew heavy timber from which Aborigines made boomerangs. Unpolished, the dark wood exuded a scent of violets. European craft workers made glove and handkerchief boxes from the fragrant timber.³⁸ A forest of boree cloaked parts of the Stockinbingal district, beside the Bland Creek. Markets demanded livestock more than boree timber. By 1879, the Stockinbingal boree woodland was gone, a travelling reporter observed:

From the remains of dead trees one sees how extensive it must once have been, but now not a single live specimen can be found. The cattle have eaten off the tender plants as they appeared above the ground. The old ones have died through age, and the result has been the total extinction of the boree scrub.³⁹

Joseph Maiden, it seems, came to believe that native plants held more than economic significance. To be valued and nurtured, the distinguished scientist argued later in life, plants did not require direct, practical usefulness. Settlers had ethical obligations to protect native vegetation. 'To those people who put immediate utilitarianism in front of everything', wrote Maiden in 1908 when Director of Sydney Botanic Gardens, 'let me remind them that we are pioneers of a continent—a continent which possesses a remarkable and in many respects a unique vegetation; and the pleas of those who ask that the specialised vegetation should not be destroyed unnecessarily is worthy of some regard.'⁴⁰ He described a particularly large and 'beautifully rounded' Cootamundra wattle in the Bethungra district. The tree looked like 'a gigantic mushroom', sheep had nibbled every leaf from lower branches. 'Of course this was an exceptional tree', wrote Maiden, 'and it gives rise to painful reflections as to the wickedness of human nature, when one is informed that some miscreant has barked this tree, which was, without doubt, one of the most beautiful trees in the Colony.'⁴¹

³⁸ Maiden, *The Useful Native Plants of Australia*, p. 309.

³⁹ 'A Tour Through the Pastoral District of the Bland', *Cootamundra Herald*, 11 January 1879, re-published from the *Town and Country Journal*.

⁴⁰ Joseph H Maiden, 'A Plea. Our Brush Forests', *Sydney Morning Herald*, 6 June 1908.

⁴¹ Joseph H Maiden, *Some New South Wales Plants Worth Cultivating for Shade, Ornamental, and other purposes*, Department of Agriculture, Sydney, 1896, p. 9.



Flowering canola, Harden district, October 2001.

Northeast of Bethungra, at Cootamundra, devaluation of indigenous life and local ecologies brought profound silences. Before colonisation, Cootamundra was a place where diverse voices found expression. In a swampland reserve on Muttama Creek, Gudhamangdhuray clanspeople allowed turtle populations to flourish unhampered.⁴² Autumn and winter rains soak the stony ranges above Cootamundra. Moisture seeps from hillside springs and flows into Muttama Creek. In 1896, a visiting journalist discovered that 'Cootamundra' was 'an aboriginal name signifying a marsh, the site of the town having been a lake or swamp, and used to be a series of gilgais and crab-holes in the lower parts, which are now drained by the growth of the town.'⁴³ Silence had descended over Cootamundra since the town was established in the 1860s. The journalist offered a strident narrative of progress to expunge the quiet:

Few, indeed, of the travellers who happened to camp near the site of the present town some thirty years ago only, and who were wont to be lulled to sleep by the sibilant sounds of insect life and the nocturnal croakings of the festive bull-frog, issuing from the swamp close by, could dream that the evolution of time has brought about such a change as has taken place here. The lake is dried up, the voice of the turtle and the quack of the wild duck is no longer heard in the land, the bull-frog is silent, and on the scene of these midnight revels has sprung up with remarkable rapidity a splendid town, of which more anon.

Parts of the turtle swamp survived into the twentieth century. Cootamundra barber Alan Crowe told me about a place below the High School, the northerly part of an undeveloped remnant of swampland locals called 'Frogs' Hollow'.⁴⁴ Alan remembers riding past at night to visit his wife and newborn baby at the Mercy Hospital. Many frogs called from the watery place, an area now covered by a football oval. Flat paddocks either side of the Temora road just outside Cootamundra offer a sense of the drained swamp. Here, after particularly heavy downpours upstream, earthworks cannot contain Muttama Creek. Elderly eucalypts and grass tussocks rise from a sheet of water.

⁴² See Introduction.

⁴³ *Cootamundra Herald*, 25 January 1896.

According to anthropologist Alfred Howitt, Gudhamangdhuray clan territory centred on the swampy place where the town of Cootamundra grew. Members of the major southern Wiradjuri group defined themselves in relation to the swamp, a place where turtles were protected from hunting.⁴⁵ Survivors of disease and violence maintained links with Cootamundra throughout the squatting period. James Gormly wrote of Wiradjuri camped near Cootamundra homestead in the 1850s.⁴⁶ Later in the nineteenth century, agricultural development and closer settlement displaced Wiradjuri people from local pastoral stations. Ecological fragmentation and the local extinction of many food species made life difficult. Sanctuary law protecting turtles in Cootamundra swampland and other species elsewhere could no longer be enforced. Dispossessed and hungry families gathered at a fringe camp on the outskirts of Cootamundra.⁴⁷ 'Arranged with police to help me get the children tomorrow', Warangesda missionary John Gribble noted in his diary after arriving in Cootamundra in January 1882.⁴⁸ The missionary took fourteen 'mostly young Natives' to Warangesda, the *Cootamundra Herald* reported, far southwest beside the Murrumbidgee River.⁴⁹ In the camp, Gribble faced strong opposition from elders:

Feb. 1st Rose early. Albert and I sought and found out blacks camp. Found about 30 men, women, and children, all in a sad state of semi-nakedness and hunger. Gave a man some money to buy bread. Talked kindly to all about Warangesda. Several seemed willing to go. But some of the older ones were very free in opposing my suggestion. I hope to get about a dozen away with me.

Perhaps with police help, Gribble overcame the resistance of parents and elders:

⁴⁴ Alan Crowe, conversation at Cootamundra, 4 December 2001; see 'Returning to Cootamundra', Chapter Three, for local Wiradjuri perspectives.

⁴⁵ See Introduction and 'Pathways', Chapter Two.

⁴⁶ Gormly, 'Early Days in this District'.

⁴⁷ Read, *A Hundred Years War*, p. 35.

⁴⁸ John B Gribble, 1882 diary, Australian Institute of Aboriginal and Torres Strait Islander Studies, MS 1514/1, Item 3, entries made in late January and early February 1882.

⁴⁹ 'The Warangesda Mission', *Cootamundra Herald*, 4 February 1882.

Friday 3rd Took 12 poor waifs and strays from Cootamundra to the mission station. All at home gave the newcomers a most hearty welcome.⁵⁰

As John Gribble led Wiradjuri children away from Cootamundra, he participated in the erasure of a rich culture heritage. Oral cultures depend on the transmission of knowledge and language between generations. Understandings are contextual, rising from engagement with the life and characteristics of particular places. At Warangesda, far to the southwest, the newcomers could not hope to maintain knowledge of the intricate natural patterns and living systems of the Cootamundra district. When the Aborigines Protection Board opened the Aboriginal Girls Training Home in 1912, Cootamundra too became a place where stories of country were silenced and lost. On a hilltop east of the town, inside the former Cootamundra hospital, Board staff trained Aboriginal girls from across New South Wales as domestic servants.⁵¹ The Cootamundra fringe camp probably permanently dispersed when the institution opened. Wiradjuri parents and elders feared Aborigines Protection Board officers would take their children.⁵² Gudhamangdhuray clanspeople abandoned what remained of the turtle sanctuary below granite hills.

People lost places granting life and identity, and places lost people granting ecological stability and wellbeing. Displacement broke ties of mutual care. Anthropologist Pamela Lukin Watson described totemic relationships Karuwali people of southwest Queensland held with particular bodies of water. Before lowering themselves to drink, Karuwali paused and spoke gently, with reverence, to watery places. Ceremonies maintained abundant water supplies and bolstered the fertility of aquatic plant and animal species. When pastoralists murdered and displaced Karuwali, water bodies became 'orphaned', and 'were said to cry out in pain.'⁵³ On the southwest slopes and southern tablelands of New South Wales, Mary Gilmore remembered her father refusing to camp beside 'The Dead Water' places:

⁵⁰ Gribble, 1882 diary.

⁵¹ 'Opening of the Hospital', *Cootamundra Herald*, 31 August 1889.

⁵² Kabaila, *Wiradjuri Places: The Murrumbidgee River Basin*, p. 59.

"The Dead Water" was a spring, soak, or waterhole at which no black sat, because all the group in whose walk-about it had been, were killed out. The dead were away, but the dead still owned it. No strange black visited it, no tribe trespassed on it. Like our cemeteries it belonged to those who were gone. There were many such places spoken of in the early days. Later on, the word was blotted out in a surveyor's name or forgotten. But when in 1872 we drove from Wagga Wagga to Goulburn, and back again, more than once we made the horses stretch at evening, The Dead Water being the only place for the nightly camp.⁵⁴

As Wiradjuri abandoned the fringe settlement outside Cootamundra and camp-fire embers turned black, did the turtle swamp begin to grieve? Muttama Creek flows south from Cootamundra and joins the Murrumbidgee River upstream from Gundagai. Mary Gilmore described a forlorn Murrumbidgee, mourning the loss of Wiradjuri people from riverside places:

The Murrumbidgee whispering at its banks cries,
"Where are they
Whose thousand camp-fires drove the darkness of the night away?"
Silent the camps, the tawny embers cold,
No more to throw on night their scattered gold.⁵⁵

I walked along Muttama Creek through Cootamundra one spring afternoon. Decades ago, council workers on earthmoving machines had enlarged the channel of the waterway on the northwest edge of town to contain floodwaters and protect urban property. Here, above the excavated channel, what appears to be a section of swamp bed is visible. The exposed earth is dead and dry, black with millennia of decayed plant life. When heavy rains drench the town and its surrounding granite hills, stormwater drains and earthworks direct runoff into Muttama Creek, away from flat areas where suburban homes and pub-

⁵³ Pamela Lukin Watson, *Frontier Lands and Pioneer Legends: How pastoralists gained Karuwali land*, Allen and Unwin, St Leonards, 1998, p. 49.

⁵⁴ Gilmore, *More Recollections*, p. 34.

⁵⁵ Gilmore, 'O Race the Forest Knew', *The Passionate Heart*, p. 68.



Muttama Creek in flood, Cootamundra, December 1919 (National Library of Australia).

lic buildings stand. In the centre of town, I noticed a vigorous mat of water couch (possibly **badinbadin**, **baguwang**, **durrumbal**, *Paspalum paspalodes*) almost bridging the channel of Muttama Creek. Almost imperceptibly, the watery body attempts to re-establish itself. Grass creeps deeper into the stream, trapping silt carried by the flowing water. Engineering works, it seems, have failed to destroy the will of the Gudhamangdhuray swampland to exist. As water couch and other aquatic plants hold water and earth, swampland slowly returns. To halt the dynamic process of swamp regeneration, Cootamundra Shire Council poisons cumbungi and water couch growing in the channel of Muttama Creek.⁵⁶ Elimination of aquatic plants helps stormwater flow swiftly through the channel and beyond town. Only after especially heavy rains will Muttama Creek overflow and inundate Cootamundra streets and domestic gardens.

Cultural processes erase memories of Cootamundra swampland, complementing storm drains and the poisoning of water plants. 'Set in a prosperous valley, Cootamundra is a picturesque town which is well-known as the birthplace of Sir Donald Bradman and as the home of Cootamundra wattle', reads a promotional publication issued by the Cootamundra Development Corporation.⁵⁷ Donald Bradman is a national cricketing hero. Grown in many Australian gardens, Cootamundra wattle is an attractive shrub, indigenous to the local area, with grey foliage and abundant bright yellow flowers. Bradman and Cootamundra wattle are offered as town icons because they are valued beyond Cootamundra, in the national and global arenas the southwest slopes are harnessed to serve. The promotional publication makes no references to the Wiradjuri origins and rich cultural context of the placename 'Cootamundra'. Modern cultural processes obscure and deny local elements—ecologies, species, histories—irrelevant to globalised systems of power and economics.

⁵⁶ Shire of Cootamundra, 'Drainage: Policy and Procedure', file no. D8/1; and Willing & Partners Consulting Group, *Cootamundra Floodplain Management Plan*, Crows Nest, 2001, p. 10.

⁵⁷ *Cootamundra New South Wales: New Country Living*, Cootamundra Development Corporation, c. 2000.

In the twentieth century, powerful colonial processes silenced opposition to the removal of Aboriginal children by officers of the Aborigines Protection Board. 'We Aborigines had no say', explained Iris Clayton, a former resident of Cootamundra Aboriginal Girls Training Home.⁵⁸ Clayton was born in 1945 at Leeton, in the Murrumbidgee Irrigation Area northwest of Narrandera. Her family lived alongside other Wiradjuri and poor settler families at Wattle Hill, a shantytown just outside Leeton. Huts made from materials salvaged from the neighbouring town rubbish tip stood in rows across the hillside. Residents of the fringe settlement worked in a nearby cannery and on local irrigation farms picking fruit.⁵⁹ When Iris Clayton was eleven years old, Aborigines Protection Board officers visited Wattle Hill to speak with her mother:

Mum had one day to pack our things and we never said goodbye to my grandmothers. I remember Mum scrubbing us all in our big round galvanised bath tub. She nearly took the skin off us. Then the taxi arrived early for the eight o'clock train. Auntie Lulla came running down the hill crying and pressed her last ten shilling note into my hand.⁶⁰

James Morgan grew up at Wattle Hill. He told Peter Kabaila about the day two policemen and a welfare officer came to take eight girls and boys from one family. Official power, Morgan explained, stifled Aboriginal opposition to child removal:

There was a huge crying and screaming, because they knew they were being taken. They were trying to run away and hide and were being pulled out by their legs from under the beds. Their mother was there. That's why the police were there, to enforce orders given by the welfare officer. He stood by and organised it, but it was the cops' job. They took the whole lot, 8 girls and boys. Their mother stayed for a while. I don't know what became of her after that. People stood outside and watched, but wouldn't do anything because they were too frightened. In those days the police could just go into your house and

⁵⁸ Clayton and Barlow, *Wiradjuri of the Rivers and Plains*, p. 2.

⁵⁹ Ossie Ingram, in Kabaila, *Wiradjuri Places: The Murrumbidgee River Basin*, p. 133.

⁶⁰ Clayton and Barlow, *Wiradjuri of the Rivers and Plains*, p. 7.

do whatever they wanted. You couldn't go to anyone to complain, you couldn't say anything to anybody.⁶¹

At Cootamundra inside the Aboriginal Girls Training Home, Protection Board officers tried to expunge Aboriginal culture from the hearts and minds of residents. 'Our traditional language was banned and punishment was meted out to those who used it', recalled Iris Clayton.⁶² Lesley Whitton, another former resident of the Home, explained the agenda of the Aborigines Protection Board. Erasure of Aboriginality offered Aboriginal girls a position at the bottom of Australian society. Western notions of hierarchical social order prohibited alternative ways of being:

At the Home we were taught to cook, sew, wash and iron. Some of the girls were obviously unhappy and unsettled. The police brought them back. I've never been involved in Aboriginal issues before, because we were not taught Aboriginal culture at the Home. Some of the girls who were reared in the culture on the missions and reserves lost out when they were moved to the Home. Aboriginal culture was cut right there.⁶³

Like other nation states bound to global networks of trade and power, Australia could not tolerate indigenous lifeways and connections to place.⁶⁴ On the southwest slopes, colonists held Wiradjuri country. Harnessed for export-oriented production, the fertile region generated national wealth. Obstructions to colonial and national objectives were removed. Town councils and the Aborigines Protection Board encouraged Wiradjuri to settle on reserves established outside the productive farming region—Warangesda on the Riverine Plain, Hollywood at Yass on the southern tablelands, and Brungle in the foothills of the Snowy Mountains—where land was cheaper and settlement less intense.⁶⁵ Displacement of Wiradjuri, and erasure of language and culture, removed and silenced a group of people opposed to colonisation. Wiradjuri elder Stan Grant

⁶¹ James Morgan, in Peter Rimas Kabaila, *Wiradjuri Places: The Macquarie River Basin and some places revisited*, Black Mountain Projects, Jamison Centre, 1998, p. 94.

⁶² Clayton and Barlow, *Wiradjuri of the Rivers and Plains*, p. 9.

⁶³ Lesley Whitton, in Kabaila, *Wiradjuri Places: The Murrumbidgee River Basin*, p. 68.

⁶⁴ Brody, *The Other Side of Eden*, p. 189.

grew up on an Aboriginal reserve beside the Lachlan River at Condobolin. 'If you don't have your language, you don't have a culture', he told me.⁶⁶ Stan remembers elderly Wiradjuri making sure children did not learn the tribal language. 'It was a real threat', Stan said,

the fear was real, that had we gone to school and started speaking Wiradjuri, that the governments may've come and removed us and took us away from there. Because the threat was there, all the time: 'if you speak this language to your kids we'll come and remove your kids', you know. So the language was never spoken around us.

In the final decades of the twentieth century, Aboriginal activists and supporters brought radical change to community attitudes and government policy. For the first time since squatters crushed resisting clans, Wiradjuri could make firm political demands. In June 1993, one year after the High Court of Australia recognised native title, lawyer Paul Coe and other Wiradjuri formally claimed ownership of the vast region once owned by their people. 'There was no legal or moral right to take the Wiradjuri land', Coe argued. 'We're seeking more than native title; we're seeking sovereignty.'⁶⁷ The ambitious claim challenged dominant settler narratives of nationhood and agricultural progress. Terry Ryan from the NSW Farmers' Association drew upon established stories of national development to oppose the Wiradjuri action. The area claimed 'included land regarded as some of the nation's finest agricultural and pastoral land, producing wheat, rice and other crops', Ryan said.⁶⁸ *The Land* newspaper likewise reflected popular opinion: 'we can't turn the clock back and nor should we try'.

The British colonisation of Australia triggered the birth of a new nation. History is littered with cases of invading tribes and aggressive nations controlling and supplanting others. Non-aboriginal Australians of today weren't responsible for the decision to colonise Australia and they shouldn't feel guilty about the

⁶⁵ Read, *A Hundred Years War*, p. 35.

⁶⁶ Stan Grant, conversation at Canberra, 16 April 2002.

⁶⁷ 'NSW faces Mabo-style claim: Aborigines seeking native title over one-third of state', *Sydney Morning Herald*, 4 June 1993.

⁶⁸ *Sydney Morning Herald*, 4 June 1993.

treatment of Aborigines by a minority of early settlers. Australia exists, history can't be rewritten.⁶⁹

In the face of challenges posed by the Wiradjuri claim, *The Land* and other respondents sought to reaffirm dominant versions of history and the structures of power those narratives sustained. Paul Coe presented a different, unsettling story of colonial processes. Settlers had 'trespassed upon the lands of the Wiradjuri nation and forcibly, wrongfully and unlawfully dispossessed' its people.⁷⁰ Despite the unlikely possibility the claim would succeed, the alternative historical narrative told by Coe induced virulent responses. Tim Fischer, leader of the National Party and a farmer from Boree Creek south of Narrandera, warned of a 'violent backlash among the white community.'⁷¹ Landholders had weapons 'armed and ready', said one member of the Wagga City Council.⁷² According to John White, Executive Director of NSW Farmers, farmers would fight Wiradjuri people outside the legal system if the claim did succeed:

Farmers will treat this very seriously. People are not going to walk off their land without a fight. This will lead to growing suspicions against Aboriginal people and hatred and even, in the end, violence.⁷³

Sir Anthony Mason, Chief Justice of the High Court, deemed the action taken by Paul Coe and fellow Wiradjuri 'improper' and dismissed the claim.⁷⁴ Five years later, Cootamundra Shire Council erected signs telling road travellers the Cootamundra district was part of 'Wiradjuri Country'. A local reconciliation group had formed, and Pastor Cec Grant (also known as Wongamar), a Wiradjuri elder based in Albury, was at the time asking shire councils on the western slopes to acknowledge Wiradjuri territory.⁷⁵ Like the Wiradjuri land claim made

⁶⁹ 'Mabo grabs carry threat of backlash', *The Land*, 10 June 1993.

⁷⁰ *Sydney Morning Herald*, 4 June 1993.

⁷¹ 'Land bid violence warning', *Daily Advertiser*, 5 June 1993.

⁷² 'Land claims are ludicrous: Nats', *Daily Advertiser*, 10 June 1993.

⁷³ *Daily Advertiser*, 5 June 1993.

⁷⁴ 'Wiradjuri loses claim on huge area of NSW', *Sydney Morning Herald*, 24 December 1993.

⁷⁵ Cec Grant, 'Promoting Australia to the World', letter to Michael Coombes, 29 March 1998, www.csu.edu.au/division/ieu/cec/promoting.htm, accessed September 2002.

in 1993, the 'Wiradjuri Country' road signs suggested a traumatic history of death and dispossession, challenging dominant local narratives of progress and agricultural development. There was 'mixed reaction' in the local community to the new signs, the *Cootamundra Herald* reported, and members of the Shire Council received 'a number of comments from concerned residents.'⁷⁶ In 2003, I noticed that someone had again removed the timber 'Wiradjuri Country' sign at the Cootamundra Shire boundary on the Harden road. Since the signs were erected in 1998, Cootamundra Shire Council workers had replaced the stolen boards numerous times.⁷⁷ Desire to silence challenging voices remains present and active in the Cootamundra district. Rather than identifying possibilities for peaceful coexistence, the vandal and those locals concerned about the road signs appear to feel threatened by Wiradjuri and settler efforts at reconciliation.

Dialogue enables healing of ecological and social wounds. Silencing only furthers division and fragmentation. Fortunately, people are listening to painful stories and fostering change. In the late 1990s, as Wiradjuri and other Aboriginal people told alternative narratives of Australian colonisation, Cootamundra district residents joined a hopeful national process of dialogue and healing. On the pages of a Sorry Book distributed by the Council for Aboriginal Reconciliation, many Cootamundra people recorded the sorrow they felt over injustices committed by settlers: 'So very, very sorry', 'I am sorry for the part my extended family played in causing your pain', 'May your sorrow become our sorrow', 'I'm sorry for what you've all been through and the scars that you have had cut through your souls that will never heal', 'My love to you all'.⁷⁸ As the reconciliation movement at times demonstrates, settler narratives and ways of seeing destructive to Aboriginal people and to relations between settlers and Aborigines may be critiqued and rejected. Beliefs, attitudes, and cultural processes underlying the disordering of local ecologies may likewise be challenged and dismantled. Alternative stories and realities are possible.

⁷⁶ 'Reaction mixed to sign wording', *Cootamundra Herald*, 30 December 1998.

⁷⁷ Bob Glanville, telephone conversation, 1 August 2003.

Red steers and white death

Good rain fell across the southwest slopes during the winter and spring of 1986.⁷⁹ Bulky pastures and crops turned to gold as summer approached. January days were dry and hot. Under bright summer skies, I spent my school holidays on a farm north of Cootamundra, working through the harvest. I remember a stifling tractor cabin filled with grain dust and the smell of diesel. Each time I parked the motor bike in a paddock of stubble, I swiftly checked the engine and exhaust pipe. Brittle stalks on hot metal could start a fire, the farmer warned me when I started the job.

One hot and windy afternoon, we watched a great plume of smoke—tall and bulbous like an atomic mushroom cloud—rise in the south. On a hillside north of Junee, a man cutting thistles and burrs struck a stone with a hoe and sparked a catastrophe. Dry and gusty westerly winds pushed flames through paddocks, across roads, beyond frantic firefighters. Next day, the forested range beside Bethungra was alight. Winds subsided and temperatures fell as night came. In the darkness, workers burned back into the hills and graded wide swathes on lower slopes. Fears were realised the following day as temperatures climbed and erratic gusts lifted burning embers over containment lines. Three new fire fronts swept eastward with extraordinary intensity. Witnesses described great fireballs running across hills, walls of fire igniting paddocks a kilometre ahead, and flames taller than thirty metre pine trees. Fire truck drivers could not keep pace. One farmer recalled a tube of fire speeding across paddocks, flames coiled and rolling—a fabled ‘red steer’ of Australian wildfire.⁸⁰

Firefighting coordinators kept track of developments from a helicopter. One hundred and fifty Sydney bushfire brigades arrived in large trucks fitted with advanced equipment. To save homesteads, a local crop-spraying pilot released

⁷⁸ *The Sorry Book*, Cootamundra Heritage Centre, October 2001.

⁷⁹ ‘How right he was!’, *Cootamundra Herald*, 19 January 1987.

loads of water above encroaching flames. Bethungra village residents abandoned homes as the blaze approached. Police reported 'widespread panic and general chaos'. Likened to a 'steam train running on full power', the inferno pushed east towards Muttama.⁸¹ In one tragic incident, a ball of flame enveloped firefighters Allan and Paul Rolles. Severely burned, the father and son drove back to their farm near Gundagai. Allan asked his wife Patsy to spray them with a garden hose. The men were treated in local hospitals then transferred by air ambulance to Sydney. Both died in the burns unit of Concord Hospital.⁸²

Cooler weather and light rain helped firefighters contain and eventually extinguish the inferno. In three days and across thirty farms, the fire consumed more than twenty thousand hectares. Twenty-five thousand sheep and cattle perished. Farmers buried scorched, blistered bodies in deep pits. They wondered where and how to begin restoring their devastated properties. Later, in a Muttama park, the local bushfire brigade erected a cairn of quartz stones in memory of Allan and Paul Rolles. The memorial cairn stands under a mature ribbon gum (**marrung, ganinggaban**, *Eucalyptus viminalis*). When I saw the memorial in autumn 2002, long strips of bark swayed from branches above the cairn. Some nearly touched the ground. Most varieties of eucalypts ache for the heat and power of flame. Crisp streamers of dry bark peel away and invite fire upward. Seedpods burst as flames build. Once fire passes, fresh leaves sprout from lignotubers. With rain, seed germinates on surfaces burned clear of grasses and shrubs.⁸³ Tragically, the shady area under the ribbon gum seemed an appropriate position for the memorial cairn of white stones. Over millions of years, fire has shaped and energised local ecologies across Australia. Efforts by settlers to suppress the natural force of fire continue to bring dreadful harm to land and people.

⁸⁰ 'Fire was 'fast, fierce, terrifying'', *The Land*, 22 January 1987.

⁸¹ 'Bethungra evacuated as bush fire ran wild', *Cootamundra Herald*, 19 January 1987.

⁸² 'Fire victims well known at Cootamundra', *Cootamundra Herald*, 19 January 1987.

⁸³ Stelling, *South West Slopes Revegetation Guide*, p. 254.



Memorial stone cairn beneath ribbon gum, Muttama, March 2002.

Mary Gilmore noted differences between settler and Wiradjuri responses to summer bushfires on the southwest slopes more than a century before the devastating event of January 1987. 'I have seen a whole station in a panic', wrote Gilmore,

men, women and children nearly killing themselves with frantic and wasteful effort; and then a handful of blacks and lubras under their chief come and have the fire confined and checked in no time. Having the confidence of habit they allowed the fire freedom where it seemed least dangerous. In one such fire they concentrated on the sides, letting the centre flame run forward. But far in advance of this ran lubras hunkering down over their half-yard-wide flares. Behind the first row a second line was at work, and behind this a third, each fire opposite the gaps between the forward ones. The advancing tongues of flame having been kept narrow by attention to the sides, the draught was narrow, so a very wide front of little fires was not necessary. When the advance met the little islands of burnt grass it died there; in the lanes between it was beaten out. The chief told my father that unless fire was kept narrow and beaten out before it created a high wind it was no use trying to fight it. Once it created its own such wind it was invincible.⁸⁴

Settlers applied force to contain fire outbreaks. In contrast, Wiradjuri relied on detailed understanding and subtle action:

There was a difference between the blacks' methods and the white's. The white man used large bushes and tired himself out with their weight and by heavy blows; the blacks took small bushes and used little and light action. The white expended the energy of panic; the blacks acted in familiarity, as knowing how and what to do. They used arm action only, where the white man used his whole body. Where, as a last resort, the white man lit a roaring and continuous fire-break, the aboriginal set the lubras to make tiny flares, each separate, each put out in turn, and all lit roughly in line. The beaters they used were so small that they hunkered to do the lighting and beating.⁸⁵

⁸⁴ Gilmore, *Old Days: Old Ways*, p. 153.

⁸⁵ Gilmore, *Old Days: Old Ways*, p. 152.

Wiradjuri and other Aboriginal peoples considered fire 'a major totem, a friend', writes historian Bill Gammage.⁸⁶ Settlers found uses for fire. Smoke haze cloaks the southwest slopes of New South Wales in autumn, as farmers burn the sun-faded stubble of crops grown the previous year. Nevertheless, most settlers came to see fire primarily as a natural force to be feared, not an amiable agency to befriend. Eucalypts, wattles, chocolate lilies, yams, cumbungi, and other native plants flourish after the passage of fire. Not so ripe wheat crops and expanses of annual pastures turned dead and dry by summer heat. In the twentieth century, Australians developed sophisticated firefighting trucks, water-bombing aircraft, and other powerful technologies to master bushfires and protect paddocks of imported plant and animal species.

'Men pay for the increase of their power with alienation from that over which they exercise their power', philosophers Theodor Adorno and Max Horkheimer observed in their famous critique of the Enlightenment.⁸⁷ Reliance on force above detailed knowledge to meet bushfires maintains a dangerous ignorance. After fire devastated wide parts of New South Wales in December 2001, the Federal Government established the Bushfire Cooperative Research Centre 'to form a vital 'fighting force' to increase understanding of bushfires and how to control them.'⁸⁸ While seeking to better understand bushfire behaviour, the rhetoric of the announcement implied that the new Research Centre would maintain the same agenda of mastery responsible for the ignorance the Government hoped to dispel. Since the beginning of British colonisation, settler efforts to master dynamic rural terrains have blocked close learning. Powerful relationships are monological. Understanding does not easily flow both ways. Quests to suppress fire have obscured the interdependency of fire and the living systems of Australia. Humanity is the 'fire agent' of the biosphere, argues fire historian Stephen Pyne. As such, people hold a 'duty of care to the living world' to recognise their 'ecological presence' and to nourish local ecologies

⁸⁶ Bill Gammage, *Australia Under Aboriginal Management*, 15th Barry Andrews Memorial Lecture, Australian Defence Force Academy, Canberra, 2002, p. 9.

⁸⁷ Theodor W Adorno and Max Horkheimer, *Dialectic of Enlightenment*, Verso Editions, London, 1979, p. 9.

⁸⁸ Peter McGauran, Federal Minister for Science, 'New Bushfire Research', media release, www.dest.gov.au/ministers/mcg/dec02/mr_107_101202.htm, accessed July 2003.

with careful burning, Pyne said recently at a fire conference in Sydney.⁸⁹ Fortunately, the conference gathering, the formation of the Bushfire Cooperative Research Centre, and other developments indicate that settler Australians are increasingly willing to hear the crackling voice of bushfire.

Since the start of British colonisation, settlers have often responded with surprise and fear when natural forces and ecological constraints arise in strident ways. Harmful, incomprehensible, and unexpected phenomena are frightening. Panic behaviour during bushfire, as observed by Gilmore and reported by Cootamundra police in January 1987, is one example of fearful responses to powerful expressions of a natural force. Similarly, Australians have shown fear in the face of farmland salinisation. In the late 1990s, scientific forecasts of escalating salinisation destroying infrastructure and limiting agricultural production captured public attention. People imagined the salinisation process as a frightening beast stalking inland paddocks. Journalists and politicians spoke fearfully of a 'silent, creeping menace', a force 'that threatens our farmers', the 'dryland killer choking the land's lifeblood', an 'insidious poison', 'a cancer slowly creeping along the system', 'the White Death'.⁹⁰ More than hyperbole of political speechwriters and reporters, a profound haunting underlies these vivid responses to dryland salinisation. Rising, salty watertables draw attention to the ecological limits of farmland. Salinity challenges the established, demanding models of agricultural science and modern farming. Agriculture is banished from productive places.

As scientists reveal the seriousness of ecological disorders in agricultural regions, a widespread lack of familiarity with natural patterns evokes fearful responses. Few Australians, it seems, understand how modern agricultural systems induce dryland salinisation and other ecological problems. In turn, few

⁸⁹ 'Fire as hearth or holocaust: it's our choice, says expert', *Sydney Morning Herald*, 6 October 2003.

⁹⁰ Justin Murphy, 'Salinity—our silent disaster', <http://abc.net.au/science/slab/salinity/default.htm>; 'Bitter harvest: dryland salinity in Australia', *Sydney Morning Herald*, 3 December 1999; 'Dryland killer choking the land's lifeblood', *Advertiser*, 20 November 2001; 'Salinity: Qld's life or death decision', *Queensland Country Life*, 18 July 2002; and 'Salinity alarm bells ringing', *Queensland Country Life*, 23 May 2002.

can imagine how to address those disorders presently undermining food and natural fibre production. Kentucky farmer Wendell Berry observes that 'when we have destroyed the forests and prairies to replace them with agriculture we have never known what we were doing because we have never known what we were *undoing*.'⁹¹ A similar process took place on the western slopes of New South Wales. Ancient herding and agricultural traditions infused the modern restlessness of settlers.⁹² Ignorant of local ecologies, colonists erased grassy woodland and built patchworks of crops and pasture. Rural landscape images of country homesteads, wire fences, old paddock trees, golden crops, and iron woolsheds are familiar to most Australians. Complex links between ecological disorder and the operation of industrial farmland are rarely considered, let alone understood.

Cultural analyst George Myerson observed a 'dark relegitimation of the modern order of things' at work in Britain as people responded to global warming, 'mad cow disease', and other phenomena.⁹³ Faith in narratives of scientific and technological progress faltered as the disorders arose, until science and industry generated explanations and remedies. In each case, the modern promise of knowledgable control was eventually restored and a widespread crisis in confidence averted. 'Industrialism always proposes to correct its errors and excesses by more industrialisation', notes Wendell Berry.⁹⁴ In the 1990s, Australians asked scientists and technologists to explain and arrest the spectre of dryland salinisation, a process induced by the vigorous application of abstract, universal scientific theories and industrial technology. 'Scientific and technological innovation both on farm and in laboratory will play a fundamental and increasing role in the development of sustainable farming', CSIRO Land and Water scientist John Williams argued recently.⁹⁵ Technology and science would meet salinisation with force. 'Scientists have made a breakthrough that will give Queensland farmers a simple but effective tool in their fight against salinity', a rural

⁹¹ Wendell Berry, quoted in Jackson, *Altars of Unhewn Stone*, p. 10.

⁹² Brody, *The Other Side of Eden*.

⁹³ George Myerson, *Ecology and the End of Postmodernity*, Icon Books, Cambridge, 2001, p. 41.

⁹⁴ Berry, 'The Whole Horse', p. 10.

⁹⁵ Williams, 'Towards Sustainable Land Management', p. 13.

newspaper announced in 2002. 'Field research carried out in the Murray-Darling Basin is expected to lead to the development of new technology that will detect salinity before it surfaces', the Queensland newspaper explained, 'allowing both irrigation and dryland farmers to take preventative measures to slow its progress, and potentially even stop it developing'.⁹⁶

Responses to dryland salinity often demonise the salinisation process itself. Attention is directed away from causes: the industrial farming practices and global economic dynamics straining rural places. Responses focussed on symptoms shield the dominant model of primary production and agricultural trade from critique. Dryland salinisation is cast as a new 'weed' or 'feral', a production constraint for agricultural scientists and technologists to overcome. The old battle for mastery over the natural forces of the land is reinvigorated and re-legitimised, the language of war reapplied. Politicians visited the Harden district in January 2003 to learn about 'a new weapon to fight salinity'. They inspected plantations of a hybrid eucalypt called 'Saltgrow'. The tree, promoters claimed, could thrive in waterlogged and salty soils.⁹⁷ 'Australia's war on salinity has received a boost with the release of two new CD ROMs containing a wealth of information about natural resource management tools, models, frameworks and mapping programs', an article declared in the agribusiness section of *The Land* newspaper.⁹⁸ The Australian Academy of Science likewise used militaristic rhetoric to explain the different ways of monitoring salinisation patterns with electromagnetic photography from planes and satellites: 'Armed with the information such methods will provide, a coordinated community response could succeed in combating the white death, before it eats out our agricultural heart.'⁹⁹

Frequently, nationalism infuses the fearful, emotive rhetoric of responses to dryland salinisation. Dryland salinity is a 'creeping white tomb that is over-

⁹⁶ 'New weapon to fight salinity', *Rural Weekly*, 25 January 2002.

⁹⁷ 'Anti-salinity weapon' impresses politicians, *Wagga Wagga Daily Advertiser*, 9 January 2003.

⁹⁸ 'New CD-ROMs to help the war on salinity', *The Land*, online daily news, 1 October 2003, http://theland.farmonline.com.au/news_daily.asp?ag_id=16788&s=4831, accessed October 2003.

⁹⁹ Australian Academy of Science, 'Monitoring the white death—soil salinity', www.science.org.au/nova/032/032key.htm, accessed July 2003.

whelming farmland across the nation', a beast stalking 'our farmers', ready to consume the 'agricultural heart' of Australia.¹⁰⁰ Militant, coordinated efforts are required to defeat enemies of the nation. In 2002, the Federal Government declared a national 'war against salinity'.¹⁰¹ Looking beyond state borders, the Nature Conservation Council of New South Wales believes a national 'environment levy' on income tax is needed to raise enough money to fund the 'fight' against salinisation.¹⁰² Similarly, the Murray Darling Basin Commission recently called for a national 'environmental services levy' to raise more than sixty billion dollars over ten years. The massive amount of money could rehabilitate the fertile slopes and plains of inland southeast Australia, an area growing 'over 40 per cent (\$12 billion) of the nation's agricultural production'.¹⁰³ Investment generated by an environmental services levy would help sustain farmland production and national economic prosperity.

National plans seeking to address problems imagined as national in scale tend to deny possibilities for local agency and particular, place-oriented adjustments. Like the turn towards science and industry to explain and control dryland salinisation, calls to nationalist sympathies reinforce other cultural and economic foundations of ecological disorder in agricultural regions. For a nation to function, local and personal considerations must be compromised to some degree. The contribution of Australian farm production to national export earnings is usually presented as an unquestionable achievement. The Department of Foreign Affairs and Trade emphasises the national significance of Australian agricultural exports:

Agriculture is critical to the Australian economy. The Australian farm sector has long had a strong export focus, and 80 percent of total production is cur-

¹⁰⁰ 'Howard turns his mind to establishing a legacy', *Australian*, 2 November 2002; and Jennifer Goldie, Kate McDonald and Fran Molloy, 'Feature Article', www.journalism.uts.edu.au/archive/salinity/feature.html, accessed May 2002.

¹⁰¹ Joint statement by Warren Truss, Federal Minister for Agriculture, Fisheries and Forestry, David Kemp, Federal Minister for the Environment and Heritage, and Stephen Robertson, Queensland Minister for Natural Resources and Mines, AFFA02/164WTJ, 3 July 2002.

¹⁰² 'Medicare-style 'Environment Levy' necessary to beat salinity, land clearing', www.nccnsw.org.au/ncc/news/media/20011015_levy.html, accessed October 2001.

¹⁰³ Murray Darling Basin Commission, *How to Encourage Sustainable Land Use in Dryland Regions of the Murray-Darling Basin*, www.landmark.mdbc.gov.au, accessed January 2003.

rently exported. Over the last ten years, exports of agricultural goods, including processed food and beverages, grew 58 percent in volume (on balance of payments basis) and 91 percent in nominal value terms, to nearly \$32 billion in 2002. In 2002 agricultural products, including processed food and beverages, accounted for more than a quarter of Australian merchandise exports.¹⁰⁴

Celebration of high agricultural productivity and national exports of primary produce obscures the localised social and ecological costs of industrial farming systems. People are led to believe that a vigorous national economy is absolutely beneficial, a prerequisite for social and environmental wellbeing. Nationalist sympathies framed in economic terms encourage neglect towards components of rural places lacking immediate value in the global marketplace. In the nineteenth century, imperial policies and the economic demands of distant markets drove the development of industrial farmland and transport routes across the southwest slopes. Few colonists knew what local ecologies needed to remain strong and naturally productive. Industrial systems of agricultural production driven by forces rising elsewhere blocked opportunities to sense and understand the ecological dynamics of rural places. Dryland salinisation and other disorders in agricultural landscapes are products of entrenched tendencies to deny and disregard local components and patterns of connection in favour of national and global imperatives.

Over time, reliance on agricultural science and powerful technology to harness land for production prevented close learning. Rather than seeking intimate ecological understanding and the integration of primary production into natural systems, settlers applied mechanical devices and universal scientific theories to erase and overcome particularities of rural places. In the second half of the twentieth century, industrialisation and farm expansion forced thousands of farmers and workers away from agriculture and rural regions. Great machines propelled by fossil fuels banished humans from farmland. The process of agricultural industrialisation and rural depopulation, Wes Jackson argues, exempli-

¹⁰⁴ Australian Department of Foreign Affairs and Trade, 'Trade in Agriculture', www.dfat.gov.au/trade/negotiations/trade_in_agriculture.html, accessed July 2003.

fies 'a law of human ecology: high energy destroys information'.¹⁰⁵ Technological development, globalised economies of scale, and government policies continue to see fewer people work larger farms. Departing farmers and rural workers take knowledge and understandings garnered over decades and generations of labour and observation. On wide properties emptied of people and memories, less potential exists for farm managers and workers to learn the intricacies and particularities of rural places. Responsive relations between people and land are impeded. Without populous rural communities and intimate understandings of local ecologies, farming cannot be folded into complex and shifting natural systems.

As the Landcare movement emerged in the 1990s, environmental scientists and farmers developed methods to restore and maintain the productive capacity of farmland. Landcare has fostered valuable and widespread learning about local ecologies. Unfortunately, the movement has not encouraged critique of the economic and cultural dynamics underlying ecological disorder.¹⁰⁶ In farming today, production and profit maximisation remain the primary goals and standards of measure. Landcare reaffirmed the same cultural tendencies responsible for disordering local ecologies. Farmland remained a 'natural resource' to be harnessed and managed with western science and technology for the exclusive good of humanity and the national economy. While the Landcare movement did foster dialogue between people and rural places, global economic forces and government policies favouring competition ensured monological relations of power over subjugated farmland remained the norm.

During the intense drought of 2002, a panel of prominent Australian environmental scientists calling themselves the 'Wentworth Group' issued *Blueprint for a Living Continent*.¹⁰⁷ The document outlines strategies to prevent further land degradation and 'maintain the natural resource base upon which our nation is

¹⁰⁵ Jackson, *Altars of Unhewn Stone*, p. 15.

¹⁰⁶ See 'Demanding production', Chapter Two.

¹⁰⁷ World Wildlife Fund Australia, *Blueprint for a Living Continent: A Way Forward from the Wentworth Group of Concerned Scientists*, WWF Australia, Sydney, 2002.

built'.¹⁰⁸ If the *Blueprint* became government policy, farmers and regional communities would 'implement nationally accredited priorities, supported by world class scientific advice'.¹⁰⁹ Within the framework presented by the scientists, rural places remain a vital source of national economic wealth:

As a nation we have grown wealthy on the food and fibre produced by extraordinarily hard working and innovative farmers. We have all shared in that wealth and we expect to continue to benefit from it.¹¹⁰

To integrate primary production within natural systems, the *Blueprint* advocates the application of ecological theories by environmental scientists:

We have sufficient knowledge now to set a new direction that will involve a change in land use towards practices that are in harmony with the highly variable climate that is intrinsic to Australia. Such a direction could see the farming community walking in partnership with science.¹¹¹

The Wentworth Group identifies 'real opportunities for corporate Australia to invest in this process and to contribute to landscape scale transformation.'¹¹² Market prices and structures need reform, the scientists argue, to incorporate external costs presently borne by natural systems. According to the *Blueprint*, 'environmental services' provided by healthy farmland would be valued in monetary terms, and farmers paid accordingly. The Wentworth Group suggests the establishment of 'a business-like Natural Resource Management Commission (the environmental equivalent of the Productivity Commission)' to ensure effective working relationships between rural people and government agencies.¹¹³

To ensure firm foundations for ecological regeneration, *Blueprint for a Living Continent* calls for 'radical and fundamental reform'.

¹⁰⁸ World Wildlife Fund Australia, *Blueprint for a Living Continent*, p. 19.

¹⁰⁹ World Wildlife Fund Australia, *Blueprint for a Living Continent*, p. 4.

¹¹⁰ World Wildlife Fund Australia, *Blueprint for a Living Continent*, p. 3.

¹¹¹ World Wildlife Fund Australia, *Blueprint for a Living Continent*, p. 3.

¹¹² World Wildlife Fund Australia, *Blueprint for a Living Continent*, p. 3.

We don't have all the answers—nobody does—but before we start laying bricks and mortar, we have got to get the foundations right, otherwise the cathedral will tumble with the smallest of tremors.¹¹⁴

Far from offering sound new foundations, strategies proposed by the Wentworth Group encapsulate the same blend of industry, nationalism, and universal science underlying the ecological problems the scientists hope to address. *Blueprint for a Living Continent* advocates a familiar plan. Throughout the twentieth century, scientists had worked with industry groups and farmers to develop new agricultural systems. Despite arguing for the integration of farming with natural patterns of land and climate, it seems the Wentworth Group of scientists does not consider local knowledge about particular rural places a prerequisite for change. Instead, the delivery of funding and 'world class scientific advice' to farmers will suffice. In the established tradition of agricultural science, the scientists devalue knowledge of rural places created outside the scientific paradigm. Once again, 'experts' would distribute scientific knowledge for application in rural places. By privileging abstract knowledge over local understandings, the panel of scientists reinforces the same universal framework of western science blocking the rise of farming systems in tune with Australian ecologies. Awareness of the intricacies and details of rural places is required before agriculture can be drawn into natural systems. Attention to ecological detail requires rejection of monological positions of mastery over land and the initiation of respectful dialogue with place. Intimate local knowledge emerges from close engagement with particular patterns of individual places over long periods of time, a reality implicit in Aboriginal understandings: 'The country is the context, the shape, the reason for the knowledge', writes environmental historian Libby Robin.¹¹⁵ Once the central significance of local, contextual knowledge garnered through dialogical processes is recognised and incorporated into

¹¹³ World Wildlife Fund Australia, *Blueprint for a Living Continent*, p. 4.

¹¹⁴ World Wildlife Fund Australia, *Blueprint for a Living Continent*, p. 4.

¹¹⁵ Libby Robin, 'Ecology and Identity: Australians Caring for Deserts', in David Callahan (ed.), *Australia: Who Cares?*, St Lucia, University of Queensland Press, 2004 (forthcoming).

official strategies, remedial plans like those proposed by the Wentworth Group may hold greater potential.

The Wentworth Group of environmental scientists and like-minded reformists also fail to acknowledge the historical and cultural dynamics responsible for the ecological disordering of rural places. *Blueprint for a Living Continent* and other proposed solutions designed to fit within the dominant modern order inadvertently reinforce tendencies for neglectful and destructive actions. Critique of underlying attitudes and problematic institutional structures is avoided. Reordering of priorities does not occur. The document issued by the Wentworth Group exhibits a shallow conception of the fundamental basis to ecological problems in rural Australia. Imperial policies, economic constraints, and imported frameworks of perception and belief drove colonists to destroy and displace Aboriginal clans, harness land for primary production, and unwittingly disrupt local ecologies. Historical and cultural processes shaping destructive activity and blocking dialogue between people and rural places are the primary causes of ecological disorder in agricultural regions, not the absence of sophisticated western scientific knowledge or technological capacity.

Industrial monologues suppress voices rising from rural places. In 2002, the Australian Broadcasting Corporation produced *The Silent Flood*. The major documentary series examined the phenomena of land and water salinisation induced by settler activities, a process the producers of the series described as 'the biggest environmental threat to Australia in the 21st Century'.¹¹⁶ The title 'Silent Flood' implies a widespread view that salinisation takes place quietly. Dry-land salinity scalds appear quietly, trees and grasses die quietly, animals and insects dependent on grassy woodland plants vanish quietly. 'Silent Flood' makes sense and is marketable nationwide because efforts at mastery have deafened settlers to the varied expressions of rural places. Local ecologies and other species offer messages intelligible to people. In the field of modern, industrial agriculture, non-human agencies and natural forces present in rural places

¹¹⁶ Australian Broadcasting Corporation, 'Salinity: Australia's Silent Flood', www.abc.net.au/learn/silentflood/default.htm, accessed July 2003.

are sidelined and silenced. Different understandings arise when people seek dialogue with farmland and dynamic components of living systems. When we turn towards rural places, land and stricken beings may be heard to scream, to weep for ebbing life.

Defending agriculture

One night I stuck a poster, *Conserving Grassy Box Woodlands*, to the kitchen wall inside our rented farm cottage near Wallendbeen.¹¹⁷ An image at the centre of the poster shows a diverse spread of native grasses and flowering herbs beneath box trees, somewhere on the western slopes. Poster text describes the ecological interactivity of healthy grassy woodland remnants. Purple donkey orchids (*Diuris punctata*), the poster explains, are pollinated by a particular species of wasp. If the insects disappear, so do the orchids. Squirrel gliders (*Petaurus norfolcensis*) roost in tree hollows during the day. The small possums with big ears and bushy tails emerge at night to eat insects, including pest species partly responsible for paddock tree dieback. 'Squirrel gliders are becoming very rare', says the poster. I imagined the hillside beyond the kitchen window—moonlight illuminating a ripening wheat crop and, at the base of the slope, a haunting tracery of dead yellow box trees. Wallendbeen farmland is renowned for carrying heavy crops, the basis of staple foods and export dollars. In western agricultural societies, abundant production equates with good farming and signifies the moral worth and status of farmers.¹¹⁸

Deep ecologist George Sessions describes the subversiveness of an ecological sense of interrelatedness.¹¹⁹ I felt uncomfortable and subversive fixing the poster

¹¹⁷ New South Wales National Parks and Wildlife Service Conservation Management Network Project, *Conserving Grassy Box Woodlands*, poster, no date.

¹¹⁸ Thompson, *The Spirit of the Soil*, p. 68.

¹¹⁹ George Sessions, 'Ecological Consciousness and Paradigm Change', in Michael Tobias (ed.), *Deep Ecology*, Avant Books, San Diego, 1985, p. 33.

about grassy woodland conservation to the wall inside the Wallendbeen cottage. Rather than the sort of dynamic ecological relations described in the poster, modern systems of primary production rely on powerful technologies and chemical inputs delivered from elsewhere. The poster seemed improper and awkward, a rejection of my culture and my people. Little space exists on the southwest slopes to value natural elements and patterns industrial agriculture has devalued and erased. Alternative perspectives are not encouraged. Global economic and industrial forces dominate local terrains. People draw identity, status, and income from rural property ownership and the application of vigorous farming strategies. Notions of exclusive rights over farmland enable agribusiness activity and stifle critique. In a paper titled 'Land Management and Asset Security', former National Farmers' Federation president Ian Donges argued that Australian farmers held absolute and exclusive rights over their land, a set of rights extending to future generations of individual families:

Farmers make the day-to-day management decisions affecting more than 70 per cent of Australia's land mass and 70 per cent of the water diverted from our rivers and streams. They are the most important stakeholders in good environmental management. They are passionate about protecting our natural resource base in a bid to ensure sustainable agricultural industries for their children and their children's children.¹²⁰

Exclusive private property rights over farmland, a 'natural resource base' for industrial agriculture, are deeply respected in Australia. Farming and agribusiness representatives like Donges use the rhetoric of exclusive rights to resist the legitimate interests of other groups and individuals in rural places. Most calls for changes to farming practices come from city dwellers. Dominant, dichotomised ways of knowing, whereby rural and urban domains are considered in opposition to each other, evoke hostile responses to alternative opinions. Intimate relations each consumer holds with farmland are denied and obscured. We are all nourished, our bodies kept warm and alive, by the scattered rural places where food and natural fibres are grown. Agriculture connects everyone

'in the most vital, constant, and concrete way to the natural world', writes environmental historian Donald Worster.¹²¹ To reciprocate the wellbeing and life offered by farmland, to care for living systems in which we are embedded, has never depended on private ownership. 'On the contrary', Worster observes, 'possession has often led to alienation of affection, to exploitation and indifference.'¹²² Exclusive claims over farmland turn people away, leaving scientists and farmers to address ecological disorders alone. In western societies, scientists are often asked to provide all necessary knowledge and find all necessary solutions. As Wendell Berry notes, extreme faith in the power of science reflects 'a general abdication of our responsibility to be critical and, above all, self-critical.'¹²³ Widespread critical reflection on modern systems of primary production and consumption is needed. Ecological scientists reveal escalating disorder in Australian agricultural regions.¹²⁴ An adequate response requires acceptance by urban and rural dwellers of ethical obligations to care for the wellbeing of rural places that nourish them.

Modern agriculture is a vulnerable activity. Farmers depend on the productive success of one or several genetically uniform species. Crops and stock are confined in fenced paddocks, unable to shift when disaster strikes. In the early decades of settlement on the southwest slopes, Wiradjuri could attack and immediately destroy an entire cattle herd, the primary source of income for a squatter.¹²⁵ In 2003, scientists were alarmed to discover plants affected by Wheat Streak Mosaic Virus in CSIRO breeding trial sites.¹²⁶ The disease had not been detected in Australia before. Keith Perrett, President of the Grains Council of Australia, feared the disease would cut the value of the national wheat crop by two hundred million dollars each year.¹²⁷ The Federal Government swiftly implemented an emergency management plan to contain and eradicate Wheat

¹²⁰ Ian Donges, *Connections: Farm, Food and Resource Issues*, 'Land Management and Asset Security', www.agrifood.info/Connections/2001_1/donges.htm, accessed October 2003.

¹²¹ Worster, *The Wealth of Nature*, p. 50.

¹²² Worster, *The Wealth of Nature*, p. 110.

¹²³ Berry, *Life is a Miracle*, p. 19.

¹²⁴ See Introduction.

¹²⁵ See 'Securing the land', Chapter One.

¹²⁶ 'Damage control mode', *The Land*, 24 April 2003.

¹²⁷ *The Land*, 24 April 2003.



Dust storm descending on Cootamundra, January 1915 (State Library of New South Wales).

Streak Mosaic Virus.¹²⁸ One night early in October 2001, a heavy frost descended across the southwest slopes, a rare and dreaded event. Crops in spring flower are particularly vulnerable to frost. Ice crystals turn flowers sterile, and plants fail to produce grain. NSW Farmers estimated the late frosts lost primary producers on the southwest and central slopes one hundred million dollars.¹²⁹ In some areas, frost ruined eighty percent of crops.¹³⁰ The organisation called for the Federal Government to grant emergency financial relief to farmers suffering dramatic income cuts.¹³¹ 'This state of affairs shows just what a gamble farming is', said Illabo farmer David Carter after the disastrous cold snap. 'There is certainly no need to go to Las Vegas, farming is the biggest gamble of all.'¹³²

The vulnerability of western agricultural systems strengthens the sense of moral purpose characterising the rural domain of food and fibre production. In Australia, models of farming imported from western Europe remain particularly vulnerable, despite modifications made in response to local conditions. Erratic patterns of Australian climate heighten the moral pedestal on which farming is placed. Since the beginning of colonisation, settlers have honoured the hard work needed to raise imported varieties of animals and crops across unfamiliar and unpredictable terrains. Agriculture signified civilisation and colonial success. In 1924, the *Agricultural Gazette of New South Wales* published a short article by John Strong, Professor of Education at Leeds University. 'History and literature and art have shown throughout the ages', wrote Strong, 'that daily contact with the elemental forces of nature breeds independence of character, virility of mind, constancy of purpose—qualities included among those accounted worth while in life.'¹³³ Cultivation of soil, it was widely believed, reflected a cultivated society and citizenry. Agriculture distinguishes 'man' not only 'from the inferior animals around him', the *Agricultural Gazette* declared in 1898, 'but also in-

¹²⁸ 'Government acts on wheat virus', Department of Agriculture, Fisheries and Forestry media release, www.affa.gov.au/ministers/truss/releases/03/03098wt.html, accessed July 2003.

¹²⁹ 'Frost damage bill feared to top the \$100 million mark', *Junee Southern Cross*, 29 November 2001.

¹³⁰ 'Cold blow for local farmers', *Southern Weekly Magazine*, 5 November 2001.

¹³¹ 'Frost damage highlights relief needs', *The Rural*, 30 November 2001.

¹³² 'Association branch president working to aid members hurt by the late frosts in October', *Junee Southern Cross*, 29 November 2001.

dicates the difference between the savage and the civilised state of his own species.¹³⁴ In Australia, belief in the dignity of rural activities underlay a succession of closer settlement policies implemented across inland slopes and plains. Agricultural development, many people thought, offered the new Australian nation a stable social and economic foundation.¹³⁵

Towards the end of the nineteenth century, Australian farmers and agricultural scientists responded vigorously to western European demands for wheat. In Europe, swiftly rising populations generated fears of food shortages.¹³⁶ Widespread application of new farming methods and technologies, and the introduction of improved plant varieties and superphosphate fertiliser, enabled Australia to become a major wheat exporter early in the twentieth century.¹³⁷ Popular, nationalistic writers extolled Australian agriculture and rural life. A farmer character imagined by celebrated poet CJ Dennis knew the nobility of his profession:

Wheat, Wheat, Wheat! When it comes my turn to meet
Death the Reaper, an' the Keeper of the Judgment Book I greet,
Then I'll face 'em sort o' calmer with the solace of the farmer
That he's fed a million brothers with his Wheat, Wheat, Wheat.¹³⁸

Nationalist poet Banjo Paterson likewise imbued wheat farming with moral integrity. 'Song of the Wheat' told of agricultural development across former squatting runs on the southwest slopes and plains of New South Wales. Paterson honoured those indefatigable settlers who carved farms from grassy woodlands:

¹³³ 'The Influence of an Agricultural Life', *Agricultural Gazette of New South Wales*, 1 February 1924, p. 103.

¹³⁴ 'British Millers' Requirements in Wheat', *Agricultural Gazette of NSW*, volume IX, July to December 1898, p. 750.

¹³⁵ See 'Stories of inevitability', Chapter Three.

¹³⁶ A R Callaghan and A J Millington, *The Wheat Industry in Australia*, Angus and Robertson, Sydney, 1956, pp. 407-408.

¹³⁷ Whitwell, *A Shared Harvest*, p. 26.

¹³⁸ CJ Dennis, 'Wheat', in *Backblock Ballads and Later Verses*, Angus and Robertson, Sydney, 1918, pp. 23-26.

Yarran and Myall and Box and Pine—
 'Twas axe and fire for all;
 They scarce could tarry to blaze the line
 Or wait for the trees to fall,
 Ere the team was yoked and the gates flung wide,
 And the dust of the horses' feet
 Rose up like a pillar of smoke to guide
 The wonderful march of Wheat.

In summertime, as wheat harvesting drew to a close, hard working farmers could rest with satisfaction, wrote Banjo Paterson:

When the burning harvest sun sinks low,
 And shadows stretch on the plain,
 The roaring strippers come and go
 Like ships on a sea of grain,
 Till the lurching, groaning wagons bear
 Their tale of the load complete
 Of the world's great work he has done his share
 Who has garnered a crop of wheat.¹³⁹

In the decades after World War Two, agricultural scientists and other proponents of industrial farming systems expressed concern about global food security. 'The underdeveloped world is losing the capacity to feed itself—it is losing the race between production and reproduction', agricultural scientist Eric Underwood warned in 1967.¹⁴⁰ Reasons for famine are varied and complex. Since European nations embarked on projects of colonisation centuries ago, interrelated processes of eviction and starvation have reshaped communities and places across the world. Powerful interests secured land from hunter-gatherers and subsistence farmers to produce expensive export commodities. The process continues today under economic globalisation. People dispossessed of land

¹³⁹ Andrew Barton Paterson, 'Song of the wheat', in *The Man from Snowy River and Other Verses*, Angus and Robertson, North Ryde, 1987 [1961], pp. 181-182.

¹⁴⁰ Eric J Underwood, 'Man Land and Food', 1967 Farrer Memorial Oration, *Agricultural Gazette of NSW*, vol. 78, part 5, May 1967.

must purchase food or go hungry.¹⁴¹ Food is abundant in the global marketplace. Access to food requires wealth. Agricultural scientists and agribusiness representatives tend to ignore the complex historical and economic contexts to world hunger. Instead, they argue for the intensification and spread of industrial farming. 'As our communities burst at the seams with ever-increasing numbers of mouths to feed, the demands on the production base will grow', observed Ian Macdonald, New South Wales Minister for Agriculture and Fisheries, in 2003.¹⁴² The only option, Macdonald argued, was 'continual refinement of existing technologies—and the development of new ones.'

A constructed sense of urgency infuses the industrial agenda with moral purpose and blocks critique. 'The challenge to feed, clothe and shelter the world's population has never been greater', declared an advertisement published in 1997 by Novartis, a transnational farm chemical company. Industrial strategies marketed by Novartis offered hope: 'New vision and new technology are vital to protect and nourish the crops on which we depend for survival, health and productivity.'¹⁴³ In 1955, the *Agricultural Gazette of New South Wales* praised the achievements of Australian wheat breeders over the previous five decades. The *Gazette* implied a relationship between imperial expansion and the rhetoric of hunger, reflecting the global dynamics of power and trade shaping modern agriculture: 'Another James Cook discovering another Australia in that half-century could not have achieved more for a bread-hungry world.'¹⁴⁴ Agricultural science educator Julian Cribb recently argued that Australians could help prevent a global food crisis by transferring industrial farming methods to poor countries. Economic efficiencies achieved by farmers and promises of sustainability offered by the Landcare movement made the Australian system of modern agriculture a valuable export product. 'I can imagine no finer contribution', wrote Cribb, 'which this nation might make to human destiny.'¹⁴⁵

¹⁴¹ Kimbrell, *Fatal Harvest*, p. 51.

¹⁴² Ian Macdonald, 'Agriculture on the move', *NSW Agriculture Today*, 28 August 2003.

¹⁴³ 'Novartis: New skills in protecting the world's crops', *Australian Agriculture*, National Farmers' Federation, 1997, pp. 8-9.

¹⁴⁴ 'They have banished hunger', *Agricultural Gazette of NSW*, February 1955, p. 57.

¹⁴⁵ Julian Cribb, 'Agriculture's new role in the human destiny', *Agricultural Science*, vol. 11, no. 4, 1998, p. 23.

Talk of ecological disorder in agricultural landscapes and urgent calls from environmentalists and ecological scientists for fundamental changes to farming systems challenge the moral basis of agriculture. While global economic structures force farmers to push more and more produce from land, critics cannot offer landholders financial or institutional support to explore alternatives. Conflicting demands foster insecurity, and leave farmers vulnerable. In an advertisement published recently, the major agricultural fertiliser manufacturer Incitec Fertilizers offered farmers 'Certainty. In an uncertain world.'¹⁴⁶ Clearly, the creators of the advertisement understood how promises of certainty could tempt farmers. Conducted in an unpredictable land and bound to a ruthless global marketplace, Australian agriculture is an increasingly risky and uncertain business.¹⁴⁷ The Incitec advertisement shows a photograph of a farmer wearing a checked shirt and a baseball cap. He stands in the middle of a ripe wheat crop under a blue sky. The man holds several heads of wheat to eye level, inspecting the robust grains. Golden crop sweeps towards the horizon. 'I was here', reads bold black letters across the image, beside the farmer and above the bulky sea of wheat. 'I' signifies the farmer and Incitec Fertilizers. Successful agricultural production, the words and image of the advertisement suggest, depends on individual will and industrial inputs, not integration with living systems. The farmer in the photograph appears content and secure. No other people or species are visible. No disquieting voices rise.



One autumn night I attended a public meeting inside the Stockinbingal schoolhouse. Native plant enthusiasts, local schoolteachers, and the district Landcare coordinator discussed ways to protect and nurture the remnant of grassy woodland inside the cemetery on the outskirts of the small railway town. A cold front had passed over the southwest slopes that day. Warm air rose from gas heaters

¹⁴⁶ Incitec Fertilizers, *Fertilizer News: Grain*, Southern edition, autumn 2001, p. 11.

¹⁴⁷ See comments by Owen Whitaker in 'Demanding production', Chapter Two.

towards a high ceiling. Beyond the sash windows and weatherboard walls, gentle rain returned moisture to the earth after the dryness and heat of summer.

Across one of the schoolroom walls, students had stuck careful drawings of rare woodland plants encountered inside Stockinbingal cemetery. Art teacher Sally Last described excursions to the grassy reserve, where she helped students observe and reproduce the particular forms and colours of woodland grasses and herbs. Kevin Thiele, a grassy woodlands botanist, and schoolteacher Bill Godman spoke of student involvement in developing a conservation management plan for the cemetery. Some of the coloured drawings on the wall showed yam daisies, a perennial herb with bright yellow flowers. Yam tubers were a staple food across the southwest slopes before colonisation. In response to a question about yams and other native food species, Kevin picked up a botanical guidebook to the grassy slopes and plains of inland southeast Australia. He took a moment to find the passage he wanted to read aloud, several paragraphs describing ecological change and human distress:

The Chief Protector of Aborigines for the Port Phillip District, George Augustus Robinson, provided some of the most detailed accounts of Koori use of plants and animals, as well as the deprivations they suffered as a result of expropriation of the Plains for European settlement. Of particular note is the use of digging sticks to collect substantial quantities of plant tubers, notably Murnong (*Microseris lanceolata*) and Turrac (probably *Pelargonium rodneyanum*). Before the arrival of sheep, this was not an arduous task as these plants were ubiquitous, and a morning's digging would yield enough for a family group for a week. Robinson notes that they often burnt the soil so as to find the Murnong more readily. The burning and the disturbance caused by digging would have promoted the growth and numbers of many tuberous plant species.

Robinson encountered groups that had stockpiled large mounds of Murnong in readiness for winter, when they would depend heavily on the carbohydrate-rich tubers. Upon revisiting these groups three years later, he found them mal-

nourished and diseased, devoid of their stores and begging for 'jumbuk'—the sheep that had eaten their Murnong.¹⁴⁸

Ethnobotanist Beth Gott has collated a range of nineteenth century descriptions of Aborigines in southeast Australia gathering and cooking yam daisy tubers.¹⁴⁹ She quotes explorer Thomas Mitchell, who observed toddlers being trained to unearth yams with small wooden shovels beside the Bogan River on the north-west slopes of New South Wales. Women used digging sticks to collect the pale, thumb-sized vegetable. Tubers were washed, wrapped in grass or placed in baskets woven from rushes, then baked in ground ovens. Cooking practices differed between districts. As Gott explains, yams germinate and grow best in soils made friable by digging. Tubers lie close to the surface and are easily gathered. Aboriginal burning practices opened spaces amid grass tussocks for yam daisies and other tuberous food plants to grow, and fertilised the ground with ash. When Europeans arrived on the inland slopes and plains, great numbers of domestic livestock—hard-hoofed and heavy—compressed soils, particularly around rivers and billabongs where yam daisies were abundant, making reproduction and growth difficult. Sheep and cattle relish the taste of yam leaves. Winter and spring grazing stopped the plants growing new tubers and flowering, swiftly destroying daisy populations. Cessation of the land burning practices of Aborigines and the introduction of exotic grasses also contributed to the decline. As the staple vegetable food vanished, Aborigines were forced to accept flour and sugar offered by colonists. The disappearance of yam daisies, Gott concludes, must have contributed to high death rates of Aboriginal people in southern Australia during the early decades of colonisation. Starvation, malnutrition, and associated diseases decimated Aboriginal populations, vulnerable and dependent on settlers for survival.

Bill Godman had pasted a photograph of flowering golden moth orchids (*Diuris chryseopsis*) onto a notice to advertise the Stockinbingal meeting. As well as yam

¹⁴⁸ Ian Lunt, Tim Barlow, and James Ross, *Plains Wandering: Exploring the Grassy Plains of South-Eastern Australia*, Victorian National Parks Association, Melbourne, 1998, pp. 19-20.

¹⁴⁹ Beth Gott, 'Murnong—*Microseris scapigera*: a study of a staple food of Victorian Aborigines', *Australian Aboriginal Studies*, no. 2, 1983, pp. 2-18.

daisies, Wiradjuri and other Aboriginal groups gathered the edible tubers of many different grassland orchids.¹⁵⁰ The schoolteacher had encountered the golden moth orchids the previous spring on the grassy few hectares of Stockinbingal cemetery. Like the wings of moths in flight, bright yellow petals extend outwards and upwards from the green flower stems of the small plants. At the meeting, Bill explained that botanists had never formally described the particular variation of the orchid he had photographed. Similar but different varieties grew inside other small town cemeteries beyond the horizon, and on distant roadside reserves.¹⁵¹ Before colonisation, the colours and shapes of golden moth orchids and other species shifted by degrees across country. Agricultural development fragmented the intricate patterns of grassy woodland life, silencing the particular expressions of distinctive organisms.

Months before the meeting in the schoolhouse, as summer descended, an old friend invited my family and me to her farm near Stockinbingal to walk in nearby bushland. She thought we might also like to see an axe-grinding site in a paddock just inside the boundary fence of a neighbouring property. Physical evidence inside paddocks of Wiradjuri activity and presence is rarely talked about on the southwest slopes. Landholders tend to keep knowledge of eroding cemeteries, ceremonial stone arrangements, rock paintings, and other surviving traces to themselves and trusted friends. We arrived at Margot's homestead soon after breakfast. Already the sun was hot. Storm clouds gathered in a bright December sky. Grasshoppers leapt at the windscreen as we drove along dusty tracks through golden paddocks, sheep dogs running behind. Walking in the forest, ironbark trees and wattles offered only partial shade. Our cattle dog spotted a black wallaby and sped away in futile pursuit. Insects called in the heat.

We drove further and stopped beside a fence of rabbit netting and barbed wire on the property boundary. Uphill a short distance, on the other side of the boundary fence, large blocks of sandstone lay scattered along the contour.

¹⁵⁰ Low, *Wild Food Plants of Australia*, p. 108.

¹⁵¹ Lunt et al, *Plains Wandering*, p. 7.



Axe-grinding grooves, Stockinbingal district, December 2001.

Margot spent a few minutes looking for the axe-grinding workstation among the summer grasses. She called out and we walked across. Eight or nine shallow grooves on a pale slab of sandstone. Lichen stained each depression, indicating generations of disuse. I noticed ironbark trees, trunks black and fissured, on the stony ridge above us. Downhill, sheep grazed near a dam of muddy water. An elderly yellow box stood alone in the paddock, near a dry watercourse. We walked along the hillside and found other stones bearing grooves and colourful mosaics of lichen.

Climbing back through the boundary fence, we angled our bodies to avoid the rusted wire barbs. The sound of an engine carried from the hillside where the grinding stones sat. The manager of the neighbouring farm rode towards us on a motorbike, a sheep dog sitting behind him. Man and dog gazed with suspicion. Margot took the lead, explaining that we had walked up to the ridge to see the trees and shrubs. 'They like the bush', she said. Margot introduced us and we shook hands.

Talk shifted immediately to current agricultural issues: rainfall, another mad cow scare in Japan threatening exports, a possibility of the United States eliminating tariffs on Australian lamb, cattle breeds, embryo transfer technology. No one mentioned the marked blocks of sandstone resting silently on the grassy slope nearby. The evocative stones, each of us knew, held a power to initiate change. Silence defended an established settler stance towards history and place. On the hillside near Stockinbingal, imperatives of export-oriented production and global commerce blocked responses and healing. Powerful traditions suppressed possibilities for dialogue and justice.

Revolt

Death and disorder

The photograph in a family album shows my sister and a schoolmate of mine standing beside our horse one autumn day early in the 1980s, waiting to ride across the dusty hillside. In the background, the limbs of a dead stringybark hold a tracery of fine branches. On the limbs and trunk, bark retains a reddish colour. The tree has died only recently, its leaves fallen. Around the lower part of the trunk, cattle have ripped and nibbled away moist fibres. Heartwood is visible, turned grey by sunlight.

After viewing the image, I walked up the stony rise behind the house to the dead, broken stringybark tree. Strewn across granite rocks, fallen branches lie beside tufts of wool and bleached fragments of bone. Of the many sturdy limbs once supporting a tall crown of foliage, just one remains aloft. Scars low down on the trunk record a gradual process of ringbarking. The tree had tried to heal itself. Now frozen dead and weathered grey, fresh sapwood crept over wounds. But our cattle and sheep were relentless. Contained by paddock fences, stock eventually killed the elderly tree.

Near the base of the trunk, in loose earth amid branches and rocks, I found the bulbous neck of an old beer bottle, orange-brown and scratched. I wondered who sat here generations ago, in the shade of a graceful stringybark tree, gazing north across paddocks. Perhaps someone rested after working one warm morn-

ing to build the fence that divides the rocky hillside near the remains of the stringybark. The fence, a steel web of posts and netting and barbed wire, marches across the slope in a straight line, taut and secure. I climbed over the fence and walked downhill. Cattle grazed a sparse blanket of Paterson's curse and clover. Crop stubble tinted an adjacent paddock blond. Near the base of the slope I passed an old yellow box then walked onto an expanse of disturbed earth. A dense border of sea barley grass defines the edges of the scald. Spike rush grows nearby. Like sea barley grass, the dark green, exotic species of rush flourishes in wet and salty soils.¹ Younger, smaller tussocks of spike rush pepper the slope a short distance away, suggesting the scald is spreading. On that dry day, fine white crystals formed a crust across the exposed surface trodden by cattle. I scraped a sample of the powder onto my fingernail. The sharp taste of salt.



One autumn, as afternoon shadows lengthened, I drove through North Wagga towards the Murrumbidgee River. A dirt road branches away from the bitumen before the bridge, on the uneven floodplain where giant river gums stand. My car dipped into the dusty bed of a dry billabong, Parkan Pregar Lagoon, then up again, onto Pregar Island. In the 1870s, Mary Gilmore walked to school past here. When she came to write her memoirs, Gilmore could not remember the Wiradjuri name for Pregar Island, a name her father had known. Before the intensification of agricultural development around Wagga, Wiradjuri people reserved the grassy island as a sanctuary for the guriban, the bush stone-curlew. Sanctuary law allowed pairs of the ground-dwelling bird to nest at the riverside place undisturbed by humans.²

Curlews are evocative creatures. Generations ago on the southwest slopes, the gaunt, mottled birds filled the night air with lilting, mournful cries. Wiradjuri

¹ Department of Conservation and Land Management, *Detecting Dryland Salinity in the Riverina and South-Western Slopes of New South Wales*, pamphlet, no date.

stories feature the mirriyuula, a ghost dog with the head of a clever man that arrives when curlews wail.³ The cry of a curlew signals an approaching death, elders told Margaret Tucker, especially if the bird calls from a tree above a miamia where people sleep.⁴ Perhaps in response to Wiradjuri understandings, one settler on the southwest slopes drew exactly the same meaning from the calls of bush stone-curlews. Banjo Paterson grew up on a property near Binalong, southeast of Harden. He remembered how curlews 'wailed like banshees', female spirits of Gaelic folklore whose cries warn households a resident will soon die. 'My imaginative cousin', wrote Paterson, 'said that they were the souls of lost people asking their way home.'⁵ Many people on the southwest slopes born before World War Two hold vivid memories of the bush stone-curlew and its haunting cry. Charlie Stanyer was born in 1909 and grew up on a farm near Illabo. 'They were woeful in the night', Charlie told me. 'They cried.'⁶ As a child on a farm at Mimosa, southwest of Temora, George Crooks found a curlew egg and took it to school. 'Mrs McKelvie said it was bad luck', Crooks recalled.⁷ Bush stone-curlews were considered good omens too. Some people believed the birds called and visited places they rarely frequented when rain was coming.⁸

A half moon started to glow in a hazy sky when I visited Pregar Island beside the Murrumbidgee. Pale smoke rose in the distance. Farmers took advantage of the calm autumn evening, burning paddocks of wheat stubble in preparation for sowing. I walked along the track beneath screeching cockatoos (**muraany**, *Cacatua galerita*), over broken glass pressed by car wheels into grey floodplain earth. A riverbank screen of willows, river oaks (**bilawi**, *Casuarina cunninghamiana*), golden poplars, red gums, and privet blocked views of Murrumbidgee water. On the eastern side of the island, beyond a sign 'Rivturf Instant Lawn', extended a trimmed, green expanse. Two men loaded heavy coils of soil and grass onto a truck. An old river red gum stood distant from the riverbank. Final

² Gilmore, *Old Days: Old Ways*, p. 118.

³ McNicol and Hosking, 'Wiradjuri', p. 86.

⁴ Tucker, *If Everyone Cared*, p. 52.

⁵ Andrew Barton Paterson, *Illalong Children*, Weldon Publishing, Sydney, 1989, pp. 41-42.

⁶ Charlie Stanyer, telephone conversation, 6 August 2003.

⁷ George Crooks, letter dated 2 November 1992, held by Ian Thompson, Temora.

⁸ 'Bushland Barometers', *The Land Farm & Station Annual*, 14 July 1937.

rays of sunlight made leafy branches glow. Sturdy limbs angled outward above floodplain weeds and dry grasses. Now as night falls, the drawn whistles of bush stone-curlews no longer resound against the solid trunk of the elderly red gum.

Curlews were locally extinct across most of the southwest slopes by the time I was born. Farming and grazing made life difficult for the ground-dwelling birds. In the western Riverina early in the twentieth century, entomologist Keith McKeown watched curlews trying to divert approaching sheep away from nests hidden in the grass.⁹ The birds would run by the sheep, trailing wings as if they were broken, or flutter along the ground to suggest a hopeless wound. Sheep were not tempted, of course. Hard hooves smashed countless curlew eggs. In the 1950s and 1960s, cereal crops and 'improved' pastures replaced wide remnants of native grasses. Farmers applied new technologies and scientific theories to establish high-input, high-output farming systems. Erasure of remaining grassy woodland plant communities doomed the curlew population. Farmers removed old paddock trees and fallen limbs to allow passage of broad machinery. Curlews build nests where woody debris and native grasses offer shelter and concealment. Foxes, dogs, cats, and other predators took nesting birds and chicks as logs, decaying branches, and perennial grass tussocks vanished.¹⁰

In the early decades of the twentieth century, Barellan stock and station agent George Gow recorded a dramatic process of local extinctions. Gow had lived in the Barellan district, west of Temora, for thirty years. Before the railway line was extended from Temora in 1908, he managed Moombooldool pastoral station, east of Barellan.¹¹ Later, as manager of Barellan station, George Gow oversaw the subdivision of the grazing property into farming blocks. Railway transport made shifting grain to urban markets and export terminals much eas-

⁹ Keith C McKeown, *The land of the Byamsee: Australian wild life in legend and fact*, Angus and Robertson, Sydney, 1938, p. 147.

¹⁰ NSW National Parks and Wildlife Service, 'Bush Stone-curlew', Threatened Species Information sheet, 1999.

¹¹ Temora Historical Society, *Temora Yesterday and Today*, Temora, 1992, p. 216.



Pregar Island, North Wagga, April 2001.

ier and more affordable.¹² Agricultural development proceeded apace. George Gow observed consequences of ecological fragmentation across the Barellan district as extensive pastoralism gave way to intensive agriculture, the same tumultuous process witnessed by Mary Gilmore and her father around Wagga several decades before. In the 1920s, Gow published a quarterly booklet to promote his stock and station agency. Articles covered a range of topics—fat lamb prices, crop competition results, anecdotes of local history. As settlers established farmland and erased grassy woodland, Gow recorded in his bulletin the decline and local extinction of many plant and animal species. The stock and station agent found the narrowing of biological diversity regrettable. Despite witnessing such destruction, Gow maintained faith in the project of industrial agricultural development. Ecological loss and disorder, he implied, were inevitable byproducts of human progress: ‘Wheat now takes the place of wool; 100 people can live where one did 50 years ago; matters are completely changed, and it is all for the best.’¹³

Before agricultural development, George Gow remembered, late in the nineteenth century, the Barellan district had ‘teemed’ with small animals: bilbies (**bilbi**, **ngundawang**, *Macrotis lagotis*), possums (**wilay**, **bugari**, **gindhaany**, *Trichosurus* spp., *Pseudocheirus* spp.), paddymelons, kangaroo rats (**birrambang**, **galbu**, possibly *Bettongia* spp.), and many other species.¹⁴ Some losses of native fauna happened inadvertently. Echidnas (**ganyi**, **wandayali**, *Tachyglossus aculeatus*) were ‘rapidly becoming extinct’, Gow explained.¹⁵ He once found twelve echidnas in a pit trap designed for rabbits.¹⁶ Emu and malleefowl (**yunggaay**, *Leipoa ocellata*), plentiful in ‘the old sheep days’, were now ‘driven out by civilisation.’¹⁷ Gow had not seen a quoll (**babila**, **mabi**, *Dasyurus viverrinus*) for decades.¹⁸ Water rats (*Hydromys chrysogaster*) no longer swam in pools along Mirrool Creek. Deliberate actions brought other deaths. Old papers of the Nar-

¹² See ‘Pathways’, Chapter Two.

¹³ George Gow in Barellan PA & I Society, *Early Days in Barellan and District*, Barellan, 1975, p. 21.

¹⁴ Gow, *Early Days in Barellan and District*, p. 10.

¹⁵ Gow, *Early Days in Barellan and District*, p. 25.

¹⁶ Gow, *Early Days in Barellan and District*, p. 273.

¹⁷ Gow, *Early Days in Barellan and District*, p. 195.

randera Stock Board, Gow discovered, spoke of numerous violent deeds. One season early in the 1890s, a single trapper destroyed almost two thousand wedge-tailed eagles (**muliyan**, *Aquila audax*)—thought to take lambs—on stony ranges near Binya.¹⁹ As selectors established farms on Cowabbie station near Coolamon, hundreds of brolgas (**burralgang**, *Grus rubicundus*) grazed the rising crops. To meet demands rising in distant cities for grain, farmers spread poison, killing the tall, elegant birds. 'They are seldom seen in our district now', Gow noted.²⁰

Diversity in plant life narrowed too. The boree forests—once also a feature of the Stockinbingal and Illabo districts—'were a pretty sight', George Gow remembered.²¹ Sheep and cattle find the grey leaves of the graceful, weeping tree especially tasty. Settlers felled the trees to feed stock during droughts. Grubs attacked remaining individuals, 'so that the odd miserable trees left alive to-day do not convey to our minds what a forest of these beautiful trees once looked like.'²² Nardoo grew profusely across wet areas in boree forests. Few local young people, George Gow suspected, could now identify the perennial fern from which Wiradjuri harvested seed to grind and bake: 'No doubt most of them think wheat was the first thing ever grown in this district from which bread was made.'²³

On the southwest slopes, settlers fragmented into paddocks grassy woodlands formerly tended by Wiradjuri. Natural stability and productivity depends on webs of ecological relations, on the interaction of various species and elements. The local erasure of individual species made land vulnerable. In 1919, the New South Wales Government purchased Dirnaseer, a pastoral station west of Cootamundra beside Houlaghans and Pinchgut creeks. Twenty-nine returned

¹⁸ Gow, *Early Days in Barellan and District*, p. 273.

¹⁹ Gow, *Early Days in Barellan and District*, p. 11 and p. 175.

²⁰ Gow, *Early Days in Barellan and District*, p. 50.

²¹ See 'Unremembered voices', Chapter Five; 'Boree, sifting bush, pine, etc.' is inscribed on a late nineteenth century Department of Lands map of the Bethungra pastoral run in the Illabo district, www.lpi.nsw.gov.au/maps/pmap/search/pmap_websearch.display, accessed May 2003. The parish between Junee and Illabo is called 'Boree'.

²² Gow, *Early Days in Barellan and District*, p. 10.

²³ Gow, *Early Days in Barellan and District*, p. 10.



Bank front door (detail), Barellan, 2001.

soldiers and their families built small farms on Dirnaseer.²⁴ Sydney and Mabel Rathmell acquired just over two hundred hectares of former grazing land.²⁵ With help from his brother, Sydney ringbarked and burned stands of grey and yellow box trees. He sowed wheat and grazed merino sheep. Mabel and Sydney raised six children in a pisé cottage. Dirnaseer was typical of the farming settlements established in New South Wales for returned World War One soldiers. Farms were small and life was tough.²⁶ To earn extra income, Mabel kept thousands of white leghorn hens for egg production. Sydney bought new farming technologies whenever the family could afford them. Eunice Chapman (formerly Eunice Rathmell) remembers the sad day her father drove a team of draught horses loved by the family to Temora. Sydney came home with an imported Lanz 'Bulldog' tractor.²⁷ Sydney and Mabel named their farm 'The Oaks' after a wide stand of bulloaks (**ngany**, **biilaa**, *Allocasuarina luehmannii*) growing in one corner of the small property. Sheep destroyed saplings. The aging trees 'eventually died and disintegrated', Eunice told me.²⁸ Today, the property name is the only record of the bulloak tree stand at Dirnaseer.

'A new people populates the land and know it not', George Gow reflected.²⁹ Imported cultural frameworks and colonial processes ensured a widespread and enduring ignorance among settlers of local ecologies. Farmers relied primarily on new technologies and manufactured inputs to generate primary produce. Few sought intimate understanding of complex natural patterns and dynamics. Settlers cast themselves and agriculture in opposition to terrains they perceived as harsh and erratic.³⁰ Control and transcendence, not intimacy and integration, were the primary goals of the newcomers. Across the western slopes, narrowing of biological diversity and declining ecological interactivity brought chaotic responses. In the 1940s, Donald Mackay described escalating patterns of instability and disorder evoked by industrial methods of agriculture

²⁴ 'Dirnaseer S. S. for 29 returned soldiers', *Temora Independent*, 31 March 1920.

²⁵ NSW Department of Lands, 'Parish of Hurley', 1923, National Library of Australia, map collection.

²⁶ Fry, 'Soldier Settlement and the Australian Agrarian Myth'.

²⁷ Eunice Chapman, notes compiled about the life of her mother, Mabel Rathmell.

²⁸ Eunice Chapman, letter, 17 June 1997.

²⁹ Gow, *Early Days in Barellan and District*, p. 10.

in the Wallendbeen district. Born in 1870, Mackay watched the fragmentation of grassy woodland places by agricultural development, a dramatic process Mary Gilmore, her father, and George Gow saw unfold elsewhere in the region. During the early days of pastoralism, Donald Mackay told writer Frank Clune, before the coming of the railway,

possums and native cats were to be found in nearly every hollow stump. Animal and bird life abounded in the bush; very little country had been cleared, and fallen timber just lay where it fell, giving the animals ample cover. Nowadays, the native fauna have practically disappeared. The country is cleared or ringbarked—thereby making it more productive. On the other hand, the man on the land has to contend against soil erosion, caused by wholesale destruction of timber and careless cultivation. Originally, Australia had no real pests; now we are plagued by rabbits, blow flies, and a multitude of imported weeds. Our natural grasses have been eaten out by overstocking and rabbits, and we have to rejuvenate the soil by planting subterranean clover or top-dressing with phosphate. Fluke in sheep is becoming worse since we shot out nearly all the wild duck, which are Enemy Number One of the fluke-snail.³¹

In the early decades of the twentieth century, Department of Agriculture scientists advised farmers on the western slopes to fallow cropping land for an entire year before sowing.³² Repeated cultivation kept reserved paddocks bare of grasses and weeds. Farmers began ploughing as autumn rains dispelled summer dryness. Later, once steady winter rainfall had soaked into the cultivated expanses, farmers hitched tractors or teams of draught horses to sets of harrows. Harrowing groomed paddock surfaces—the metal points of the heavy equipment broke apart clods of earth upended by ploughing. Farmers harrowed paddocks two or three times during the summer months to maintain a loose 'soil mulch' and to eliminate thirsty weeds. Sometimes, disc cultivators

³⁰ See 'Transcendence and war', Chapter One.

³¹ Frank Clune, *Last of the Australian Explorers: The Story of Donald Mackay*, Angus and Robertson, Sydney, 1942, p. 36.

³² H C Stening, 'Discing Stubble Land before Ploughing', *Agricultural Gazette of NSW*, 2 January 1914, p. 27.

were used to work fallowed land.³³ Pulverised surfaces limited evaporation of moisture absorbed in autumn and winter. Unless drought banished autumn rains the following year, farmers sowed grain into damp and friable paddocks. Unfortunately, the recommended 'long fallow' method made land especially vulnerable to wind and water erosion.³⁴

Houlaghans Creek meanders through the Dirnaseer and Junee districts, through paddocks of wheat and sheep, to meet the Murrumbidgee River just below Wagga. Bulky roots of river red gums extend beneath the deep channel of the intermittent waterway. When good autumn and winter rains soak the land north of the Murrumbidgee, Houlaghans Creek begins to flow southwest. Max Leitch grew up on a pastoral station downstream from where Houlaghans Creek joins the river. The grazier remembered the devastating effects of a great downpour across part of the Houlaghans Creek catchment in 1914. In a remarkably short space of time, storm clouds dropped four inches of rain across fallowed wheat paddocks, exposed and vulnerable. Houlaghans Creek churned towards the Murrumbidgee. Swiftly, the river level rose six feet, brimming with 'liquid mud', Leitch recalled. Farmland lost vast quantities of red-brown earth:

The mud killed every living thing in the river. Fish lined the banks with their heads out of water in the morning, and were all dead floating upside down by lunch time.

Father and the two men employed started pulling some out before breakfast. Some were to be cleaned to eat fresh, some were salted and smoked, and a wagonette load was taken around the farms off the river to be given away. There was one huge Murray Cod that was too big for two men to pull out of the water onto a sand bank. They estimated it to be well over 300 pounds and its mouth was two feet wide. Someone put its head on a stump and it remained there for many years.

³³ P G Gilder (ed.), *The Farmers' Handbook*, Department of Agriculture, Sydney, 1918, pp. 251-252; and Sutton, *Wheat-Growing in New South Wales*, p. 16.

³⁴ F J Meurant, 'Fallowing and rotation of crops', *Agricultural Gazette of NSW*, 2 January 1915, p. 73.

The lobsters and shrimps crawled out onto the bank to die in a solid band three to four feet wide and about a foot deep, and also two eels. As children, we had never heard of eels and took Father to see the water snakes in great excitement. Eels are not supposed to inhabit the western watershed. There would have been a ton of dead and dying fish to every one or two hundred yards of river bank.³⁵

On parts of the southwest slopes where soils are particularly unstable, trees play a vital role in preventing erosion. 'Saw Ringbarkers doing good work', the manager of Wantabadgery station, southeast of Junee, wrote in his diary in July 1879. 'Engaged Chinamen to burn off dead timber'. Clearing was still taking place on Wantabadgery in 1886. 'Saw Peter and showed him how to knock off suckers', the station manager noted in April. And in July: 'White getting on very slowly with scrubbing in Junee paddk.'³⁶ Sixty years later, Department of Agriculture inspectors reported the effects of ringbarking on the western side of Wantabadgery station, near Junee:

Many very bad gullies are evident. This is typical of hilly granite country. The destruction of timber has been excessive, and has been largely responsible for the erosion which is evident.³⁷

If remedial action was not immediately taken to protect the inland paddocks of New South Wales, warned soil conservation pioneer Sam Clayton in 1931, 'thousands of acres of the best wheat lands in the State will be washed and gullied into barren wastes.'³⁸ On the southwest slopes, the agricultural scientist saw gullies only a few years old that were already metres wide and deep. 'The damage has to be seen to be believed', Clayton wrote. Settlers had 'deliberately flouted nature in opening up and developing new country for agriculture', claimed the 1937 edition of *The Land Farm & Station Annual*. Erosion represented 'nature's answer to man's ruthless and reckless challenge', a wounded and re-

³⁵ Max Leitch, *Where the Red Gums are Growing*, Oxford Print, Wagga, 1985. I am grateful to Owen Whitaker for showing me this book.

³⁶ Wantabadgery station diaries, Mitchell Library, A3320-A3338, 27 July 1879, 13 March 1886, 22 April 1886, 27 July 1886.

³⁷ Department of Agriculture, inspection report, 15 February 1946, Wantabadgery West estate file, State Records NSW, 10/26077.



Erosion gully, Cootamundra district, April 1957 (State Library of New South Wales).

bellious cry.³⁹ The following year, the New South Wales Government put Sam Clayton in charge of the new Soil Conservation Service.⁴⁰ In the postwar decades, Soil Conservation Service workers on bulldozers filled in and erased many gullies fragmenting paddocks on the southwest slopes. Contour banks slowed and redirected water flowing downhill. In the 1970s and 1980s, farmers abandoned the method of repeated cultivation to control weeds. New herbicides and more powerful machines enabled the development of farming systems designed to restore and maintain soil health. Organic content and structure returned to soils, minimising the frequency and severity of erosion events.

Alec Hansen did not work Thursday afternoons at the Silver Star café. When a full moon promised visibility for the bike journey home, he rode south from Cootamundra towards a forested range of steep hills. In the 1940s, biologically diverse bushland cloaked the hilly terrain between Cootamundra and Gundagai. There, Alec enjoyed observing and learning about the varied forest plants and animals. He walked through the hills for hours, until he reached a point from where the lights of Gundagai were visible. Later, landholders erased the bushland Alec cherished, back paddocks formerly reserved for occasional grazing. They sowed crops and pastures across bare hillsides, participating in the postwar intensification of farming systems. As years passed, Alec began to notice infestations of pest insects on isolated paddock trees throughout the Cootamundra district. Before the clearing of forested country south of Cootamundra, predatory insects flew or were blown by winds from the hills into paddocks where they restricted leaf-eating insect populations. Now ecologies were disordered and unstable, natural patterns fragmented. Paddock trees sickened and died.⁴¹

³⁸ E S Clayton, 'The Control of Soil Erosion on Wheat Lands', *Agricultural Gazette of New South Wales*, November 1931.

³⁹ 'Vanishing Farmlands: Trademarks of a Reckless Agriculture', *The Land Farm & Station Annual*, 14 July 1937.

⁴⁰ Roland Breckwoldt, *The Dirt Doctors: A Jubilee History of the Soil Conservation Service of NSW*, Soil Conservation Service of NSW, Sydney, 1988, p. 54.

⁴¹ Alec Hansen, conversation at Cootamundra, 24 April 2001.

As rural colonisation progressed, one particularly disturbing trend was the steady drying of land. Springs no longer flowed in ranges west of Barellan, near Binya, George Gow noted in his quarterly bulletin. In the early 1870s, a local pastoralist told the stock and station agent, he had relied on the springs to water his livestock. Since then, the once reliable water sources had 'silted up' and disappeared.⁴² Other chroniclers of ecological change on the southwest slopes recorded a growing scarcity of moisture. In the Young district, east of Barellan, James White, Sarah Musgrave's uncle, established sheep runs where he found continuously flowing springs. In time, Musgrave explained, stock trampled and compacted the ground so much that water could no longer rise.⁴³ Back in the 1860s, remembered a Junee district resident, the dense and widespread cover of native perennial grasses ensured water rarely flowed down the surfaces of slopes.⁴⁴ As landscape ecologist Christine Jones explains, most native grasses form vase-shaped tussocks to capture and draw rainfall underground.⁴⁵ Friable and rich in organic matter, soils across the western slopes absorbed and held great quantities of moisture. Many processes kept soil loose and absorbent. Wiradjuri unearthed yams and other edible tubers and roots with digging sticks. Diverse and abundant populations of small ground-foraging mammals probed and scooped the grassy woodland surface in search of insects, roots, and fungi. Nocturnally active, the creatures buried fallen leaves, bark, and other materials as they churned spaces between grass tussocks, bolstering the organic content and moisture-holding capacity of soils. Patterns of water flow changed as perennial grasses, small mammals, and Wiradjuri people disappeared. No longer did slopes act like great sponges, holding moisture and feeding springs and swampland. Rainfall washed away down bare, compacted hillsides. Gullies scarred the land.

⁴² Gow, *Early Days in Barellan and District*, p. 161.

⁴³ Musgrave, *The Wayback*, p. 27.

⁴⁴ J Pratt, 'Junee: a history of the growth of the town from its inception in 1855 up to the present time', no. 4, *Junee Southern Cross*, 19 December 1902, from a transcribed copy in Junee Public Library.

⁴⁵ Christine Jones, 'Native perennial pastures ignored in recharge-discharge model', *Australian Farm Journal*, January 2001, pp. 58-61.

Moisture vanished from the Junee district as colonists disordered living systems adapted to conserve water. 'When this country was all bush we used to have fogs and mist all the winter', recalled Charlie Stanyer.⁴⁶ In 1909, his parents started to clear and develop Woodpark, their new farm near Illabo, northeast of Junee. 'It was then just virgin forest', Charlie explained. By the outbreak of World War Two, the Stanyer family farmed more than six hundred hectares. Wheat, a short-rooted annual grass, cloaked wide paddocks stripped of grassy woodland. When Thomas Hammond and Richard Gwynne took over Junee station in the 1850s, most of the area was 'open forest country', explained Hammond's son in 1932,

and coated chiefly with kangaroo grass. Later on when the sheep rapidly destroyed the kangaroo grass, the country went through a period equivalent to a drought, although the rainfall was good, because other varieties of grass had not arrived to take the place of the kangaroo grass.⁴⁷

'Now, Dame Nature is peculiar', noted George Gow. 'If you interfere with her, she is like a boomerang; you never know how she will rebound and hit you, and to what extent.'⁴⁸ In January 1905, when my great aunt was only a few years old, a frightening bushfire swept the Riverina. As an elderly woman, she remembered taking refuge from the flames inside a cellar beneath the family homestead near Tarcutta Creek. Perhaps it was her earliest memory. The fire began in the Jerilderie district, almost two hundred kilometres west of Tarcutta. By nightfall, the foothills of the Snowy Mountains were burning. People and stock perished as dry, gusty winds fanned the conflagration. Flames consumed wheat crops, livestock, homesteads, and people. At one stage, the fire front stretched eighty kilometres from the Murrumbidgee River near Tarcutta southeast to Tumbarumba. Twenty-seven thousand sheep grazed Tarcutta station.

⁴⁶ Sherry Morris (ed.), *Junee: Speaking of the Past. Volume 1*, Junee Shire Arts Council, Junee, 1997, p. 6.

⁴⁷ E D H, "'Old" Junee', article held by the Junee Public Library from an edition of an unidentified newspaper, 22 August 1932.

⁴⁸ Gow, *Early Days in Barellan and District*, p. 87.

Half survived.⁴⁹ Fire destroyed the bridge over Tarcutta Creek, and the woolshed on Tarcutta station burned to the ground.⁵⁰

Soon after the beginning of colonisation, ecological changes imposed by settlers promoted intense and destructive bushfires. Removal and decline of native vegetation left country exposed to desiccating summer winds.⁵¹ Trees, shrubs, and grasses turned dry and flammable. As hillsides lost capacity to capture and hold water, plants could no longer draw upon reserves of soil moisture. Dry leaves and branches fed hungry flames. The widespread extinction of small mammal species worsened the situation. Brush-tailed bettongs (*Bettongia penicillata*) each perform up to one hundred diggings every night. One bettong can each churn six tons of earth annually. As they forage in the ground, bettongs and other creatures bury great quantities of fallen bark, leaves, and other combustible materials.⁵²

On the southwest slopes and plains, wildfire interacted with a range of other factors to generate unexpected, extraordinary responses. When fire swept ring-barked land, thick stands of cypress pine, eucalypt, and other woody species rose to confound settlers. John Holloway, owner of Moombooldool station near Barellan, once contracted a team of Chinese ringbarkers and scrubbers to clear sixty thousand acres of box trees.⁵³ On Moombooldool and throughout the Riverina, grasses flourished as ringbarked forests died. When summer wildfires ravaged cleared paddocks, and winter rains soaked blackened earth, millions of woody plants sprouted. Few small native mammals remained to graze and eliminate emerging seedlings. 'Thus in a few years', explained George Gow, 'the last state was worse than the first; for, instead of open forests through which you could in many places ride at a gallop, dense scrubs, mostly of pine, appeared; and as it grew it was so dense as to become difficult to ride

⁴⁹ 'The Great Bush Fires', *Wagga Advertiser*, 5 January 1905.

⁵⁰ Belling, *Tarcutta Stories*, p. 48.

⁵¹ Peter L Smith, Brian Wilson, Chris Nadolny, and Des Lang, *The Ecological Role of the Native Vegetation of New South Wales*, Department of Land and Water Conservation, Sydney, 2000, p. 26.

⁵² Greg Martin, 'Understanding soil building processes', *Stipa Native Grasses Newsletter*, no. 16, autumn 2001.

through.⁵⁴ The Fisher family took up a farming block in 1882 on Yarranjerry station, west of Temora. Elizabeth Fisher tied bells to her children so she could find them if they vanished into the enveloping scrub.⁵⁵ Another early settler in the same district remembered the sounds of wild cattle stampeding. Feral herds snapped the trunks and limbs of young trees as they crashed through nascent bushland.⁵⁶

Scientific and technological efforts to harness rural places for export-oriented production brought unexpected and unfortunate consequences. Strategies to control complex and dynamic natural systems are misguided. As sociologist Nigel Clark explains, 'the Enlightenment project—the quest to impose order and intelligibility on the world—has ultimately exacerbated the very uncertainty it sought to abolish.'⁵⁷ On the southwest slopes, industrial power fragmented ecological connectivity and undermined the resilience, stability, and natural productivity of land. Today, global economic structures and government policies promoting competition maintain destructive styles of engaging with rural places. Narrow, productionist goals fail to incorporate the complex, long-term needs of local ecologies and human communities. Subsoils turn acid, salt scalds widen, paddock trees die, people leave. Farmland is pushed, and natural patterns continue to unravel.



Currawong is a farming and grazing district north of Harden, southeast of Young. James Roberts established Currawong and Milong squatting runs late in the 1820s. Not yet twenty years old, Roberts 'must have been a remarkable man

⁵³ Gow, *Early Days in Barellan and District*, p. 263.

⁵⁴ Gow, *Early Days in Barellan and District*, p. 10.

⁵⁵ Rob Webster, *Bygoo and Beyond*, Halstead Press, Sydney, 1956, p. 115.

⁵⁶ Webster, *Bygoo and Beyond*, p. 101.

⁵⁷ Nigel Clark, 'Wild Life: Ferality and the Frontier with Chaos', in Klaus Neumann, Nicholas Thomas, and Hilary Ericksen (eds), *Quicksands: Foundational Histories in Australia & Aotearoa New Zealand*, UNSW Press, Sydney, 1999, p. 145.

to carve out and hold two runs', thought local historian Richard Littlejohn.⁵⁸ Convict servants and free workers helped the young squatter tend stock, grow hay, and cut eucalypt slabs to build huts. Decades later, selectors arrived with steel ploughs and draught horses. I met Ted Brown, a Currawong district farmer, at his homestead one winter morning. Ted's family selected land here in the 1860s, when his grandfather was a boy.⁵⁹ The Brown family first lived in tents erected on the undulating one hundred and thirty hectares they called 'Rosevale'. Ted Brown's property is much bigger than the block selected by his forebears. In the global marketplace, Ted explained, families today need at least one thousand acres (over four hundred hectares) of Harden district farmland to make a profit.

Ted described a flat area, several acres thick with spike rush, a plant indicating wet and often salty soils. When his grandmother's family arrived at Currawong, they built a home where the rushes now grow. The look of the place showed how much the country has changed, Ted Brown said. Stories handed down in the family record dramatic alterations to local ecologies. Ted's grandfather remembered koalas (**barrandhang**, **gurabaan**, *Phascolarctos cinereus*) grunting in trees at night. Other animals are no longer heard or seen around Currawong. Years ago, an elderly man told Ted that many kangaroo rats once lived in a particular farming paddock. The small mammals built mounds of sticks and grass, then burrowed inside to nest. Since his childhood in the 1930s, Ted has noticed the disappearance of goannas, possums, babblers (*Pomatostomus* spp.), and banded lapwings (*Vanellus tricolor*). Large flocks of currawongs no longer descend from the mountains in winter. Some species seem to like the changes modern farming has brought to local ecologies. Once rare in the district, grey kangaroos, galahs (**gilaa**, *Cacatua roseicapilla*), and crested pigeons (**barrawang**, **guwabadhu**, *Ocyphaps lophotes*) are now commonplace. Ted sees growing numbers of superb fairy-wrens (*Malurus cyaneus*) in paddocks and inside the homestead garden. I mentioned bush stone-curlews. Ted has not seen or heard one for at least forty years. He remembers the mottled birds crouched

⁵⁸ Littlejohn, *Early Murrumburrah: Historical Notes*, p. 5.

under trees and beside fallen timber as he rode to school. I asked Ted to describe the cry of a curlew. As a child, he would mimic the eerie sound to induce the birds to call. Inside the homestead where we sat talking beside the fire, Ted whistled a rising, mournful wail.

Few hillsides around Currawong were cloaked in woodland by the time Ted was born. Ringbarked trees stood in some paddocks. Sheep grazed native grasses among fallen limbs and grey trunks. Farmers bulldozed most local stands of dead trees soon after World War Two. In those days, Ted explained, the heaviest crops grew on 'new ground', land cleared and ploughed for the first time. Today, fertilisers and new plant varieties allow the harvesting of even bulkier yields from paddocks cropped repeatedly. Ted has planted thousands of trees across Rosevale since the 1950s. 'They make good shelter for the stock and they make the country look a lot better', he told me. River oak and red gum saplings thrive beside gullies and across other places too salty and wet for cropping.

Local farmers are sowing deep-rooted, perennial pastures, Ted explained during a tour of Rosevale, species able to soak up more rainfall than short-rooted, annual crops and pastures. We discussed other strategies designed to make farming more sustainable. Ted mentioned the widespread application of lime to reverse soil acidification. Future problems, he feels, will inevitably arise. Despite generations of family engagement with the natural patterns of Currawong, Ted faces the land with uncertainty. 'You do one thing', he said, 'and another thing comes up.' Widespread erasure of grassy woodland life, it seems, continues to block opportunities to sense and understand ecological dynamics: 'We're only just beginning to know the land, I think.'

Ted stopped the farm ute inside a woodland remnant. He built a fence around the shady place twenty years ago. By accident, eight hectares of yellow box and red gum trees, kurrajongs, chocolate lilies, and red grass (possibly **buguwiny**,

⁵⁹ Conversation with Ted Brown, and Dick and Joyce Blundell, at Rosevale, Currawong district, 8 June 2002.

gungil, or **bugaru**, *Bothriochloa macra*) had escaped clearing and cultivation. The red gums looked sickly when Ted and I walked under them. Dense populations of psyllids and other leaf-eating insects ate the leaves of each tree. Greening Australia had recently helped Ted sow seeds of drooping she-oak, several wattle species, and other shrubs. Minute black and brown seeds sprouted amid grass tussocks and vigorous weeds at our feet. As young trees and shrubs grew into rare habitat, Ted explained, small birds would return to feast on rampant populations of pest insects attacking red gum leaves above.

Beside yellow box trees and regenerating wattles, a dam wall holds water where two slopes meet. Ted pointed to a raft that his grandchildren had made from surplus timber and plastic drums. 'They swim and camp here', he said. The grassy woodland remnant contrasts with surrounding cultivation and grazing paddocks. Inside the reserve, diverse life offers a sense of stability and comfort. With our backs to the industrialised, open farmland around us, we gazed into trees and examined the ground for seedlings. Sometimes, Ted drives to the shaded, lively place to light a fire and cook lunch. 'It's very peaceful here', he told me, 'out of the wind.'

Survival and revolt

A worn track leads from the bitumen road towards sheds of white cypress pine and corrugated iron. Beside flat paddocks and Pinchgut Creek, west of Cootamundra, the old Retreat woolshed looks monumental. Several yellow box trees shade the bare, compacted space between the sheds and the cattle yards, rough trunks and sturdy limbs holding leafy arcs to the sky. Bedrooms of the derelict shearers' quarters are stacked with chemical drums and bags of fertiliser. On hot December days, the elderly yellow box trees throw shade across grain-laden trucks leaving paddocks for railway silos. In autumn 2002, I noticed a dump of agricultural lime—brilliant white in midday sunshine—between the graceful,



Agricultural lime beside yellow box trees, Retreat, Dirnaseer district, March 2002.

ancient trees near the shearers' quarters. Contractors later dusted Retreat hillsides and creek flats with the pulverised limestone. The highly alkaline and especially reactive mineral is applied regularly to farmland to counter soil acidification. Australian farms are coated with two million tons of agricultural lime each year. According to Environment Australia, almost seventy million tons may be needed to reverse acidification and keep farmland productive.⁶⁰

Concerns about soil acidification deepened in the 1980s. As most agricultural products are slightly alkaline, the consistent export of primary produce from paddocks steadily increases soil acidity levels.⁶¹ In the later decades of the twentieth century, new high-input, high-output farming systems quickened the acidification process. Manufactured fertilisers and leguminous plants like clover and lucerne substantially bolster soil nitrogen levels. Excess nitrates filter down soil profiles, causing increased acidity. Soil acidification limits ecological wellbeing in many ways. Earthworms and beneficial micro-organisms cannot live in highly acidic soil. Calcium, magnesium, and other elements necessary for plant health become less available as acidification intensifies, while aluminium, manganese, and other toxins become more accessible to plants.⁶² Soil structures deteriorate and plants lose vigour, making farmland more vulnerable to erosion. Water escapes below the sickly roots of crop and pasture species. By restricting the growth and water consumption rates of plants, soil acidity promotes dryland salinisation. Rising watertables bring dissolved salts to the surface, compounding damage to land.

In the 1980s, sheep and cattle production gave way to broadacre cropping across Retreat, a property owned by my extended family and leased to local farmers. Shifting dynamics of domestic and global economies made intensive farming more profitable than wool and meat enterprises. Late in the nineteenth century, Retreat was a larger holding, a station devoted to the grazing of me-

⁶⁰ 'Soil Acidification: an insidious soil degradation issue', National Land and Water Resources Audit 2001, Environment Australia, http://audit.ea.gov.au/ANRA/agriculture/docs/national/Agriculture_Soil_Deg.html, accessed December 2002.

⁶¹ Bill Schumann, *The Causes of Soil Acidity*, leaflet no. 5, NSW Agriculture, 1999.

⁶² Belinda Lake, *Understanding Soil pH*, NSW Agriculture, 2000.

rino sheep for wool production. Edward Donnelly ran the property on Pinchgut Creek in conjunction with Borambola, his home station beside the Murrumbidgee River near Wagga. Donnelly also held grazing stations on the southern tablelands, beside the Darling River in western New South Wales, and in the Snowy Mountains. Responsible for a pastoral empire of around a million acres, Donnelly suffered badly during the major economic recession of the 1890s. As his debts soared, creditors Goldsbrough Mort and Company stepped in to oversee the management of Donnelly's stations.⁶³ The firm made regular inspections. 'A good deal of the country has not been very long ring-barked, & the trees are still throwing out suckers, which require constant attention', property inspector John Ross observed at Retreat in 1894. 'As regards suckers and seedlings', Ross reported two years later, 'these have been well looked after, and there is hardly one to be seen on the place.'⁶⁴ Another problem had emerged in one ringbarked paddock. Sifton bush was 'making great headway', and required control. To suppress the plant, the resident manager of Retreat planned to cut tracks through the expanse of sifton bush in summer and set fire to the paddock.

Sifton bush (*Cassinia arcuata*) is sometimes called 'Chinese shrub'. Favouring disturbed ground, the small plant with aromatic leaves and brown flowers is common in quarries and mining areas. Chinese miners apparently harvested the shrub to thatch the roofs of their huts.⁶⁵ In *Weeds in Australia*, agricultural scientist Charles Lamp noted the 'aggressive properties' of sifton bush.⁶⁶ NSW Agriculture lists the plant as a noxious weed in the Harden and Young districts. Under the *Noxious Weeds Act 1993*, farmers in these areas must eliminate sifton bush and stop its spread.⁶⁷ Alec Hansen pointed out the shrub when we met at Jindalee State Forest on a warm spring morning in 2001. For decades, Alec has observed with deep interest the intricate and shifting patterns of nature on the southwest slopes. He does not consider sifton bush a weed. The hardy, drought

⁶³ Keith Swan, *A History of Wagga Wagga*, City of Wagga Wagga, Wagga, 1970, p. 137.

⁶⁴ John Ross, inspection reports, Retreat station, 1894 and 1896, ANU Noel Butlin Archives, 2/306/56.

⁶⁵ Cunningham G M, W E Mulham, P L Milthorpe, and J H Leigh, *Plants of Western New South Wales*, Soil Conservation Service of New South Wales, Sydney, 1981, p. 688.

⁶⁶ Charles Lamp, *Weeds in Australia*, Inkata Press, Melbourne, 1976, p. 94.

tolerant shrub swiftly colonises cleared areas. Fallen leaves cloak soil. Roots hold earth. Thickets of sifton bush offer shade and cooler temperatures, allowing populations of soil micro-organisms to thrive. As ecological stability returns, Alec explained, dense communities of sifton bush thin and disappear. Eucalypts and other species grow. Sifton bush heals disturbed, wounded places. In 1902, botanist Richard Cambage found sifton bush 'very plentiful' in the Temora district.⁶⁸ He saw the shrub spreading across bare wheat paddocks. Like other deep-rooted perennials, sifton bush helps slopes resist the erosive power of wind and water. Despite the ability of late twentieth century cropping systems to bolster soil structure and organic content, denuded and ploughed paddocks remain vulnerable to extreme weather events. In March 2003, storms drenched Cootamundra farmland and broke an extended dry spell. Soil washed from bare hillsides.⁶⁹ Cootamundra Shire Council sent a grader west along Dirnaseer Road, towards Retreat, to scrape damp topsoil from bitumen surfaces.

The healing spread of sifton bush is one example of local ecologies asserting agency in the face of industrial methods of agricultural production. Unfortunately, few settlers heeded the messages offered by the vigorous plant. As the erosion events of March 2003 in the Cootamundra district show, land becomes vulnerable when ecological complexity and connectivity is destroyed. Natural agencies other than sifton bush have expressed even louder challenges to the industrial mindset of modern agriculture. 'ONE INSECTICIDE PROTECTS A WHOLE FARM!' declared a 1963 newspaper advertisement for the chemical product Malathion.⁷⁰ Until the early 1970s, farmers and grain handling authorities relied on the organic phosphorus insecticide to protect animals and stored grain from insect infestations. Widespread reliance on the chemical product gradually bred resistance into insect populations. In the summer of 1973, unwelcome rains fell across the western slopes as farmers attempted to harvest

⁶⁷ NSW Agriculture, 'Noxious Weed Details', www.agric.nsw.gov.au/noxweed/, accessed September 2003.

⁶⁸ Richard H Cambage, 'Notes on the Botany of the Interior of New South Wales', *Proceedings of the Linnean Society of New South Wales*, vol. 27, p. 194.

⁶⁹ 'Post-storm clean up', *Cootamundra Herald*, 7 April 2003.

⁷⁰ *The Land*, 5 December 1963.

crops. The Grain Elevators Board of New South Wales agreed to accept relatively moist grain, despite an increased risk of insect infestation. As the wheat harvest of 1973 proceeded, Board staff struggled to contain insect numbers inside storage facilities. Malathion, they discovered, had lost its effectiveness.⁷¹ The following year, the Grain Elevators Board switched to an alternative grain insect poison, bioresmethrin. Peter Druce, Chairman of the Elevators Board, admitted that bioresmethrin offered only 'breathing space'. In the longer term, the Board needed to find means other than poisoning to protect stored grain. The dynamic ability of insect populations to resist human efforts at mastery, Druce realised, ensured the eventual failure of any chemical control strategies.⁷²

Mounting problems with insect resistance seemed not to undermine a widespread faith in the ability of humans to master natural domains for primary production. Many people still thought nature essentially knowable and controllable, a belief on which powerful industrial interests depend. In the final decades of the twentieth century, agricultural scientists and chemical corporations initiated what political scientist James Scott called a 'biological arms race' with dynamic living systems.⁷³ 'Will smart insects inherit the earth?' asked the Wellcome chemical company in 1985.⁷⁴

Insects adapt quickly, are clever and hard to kill. Look how the Lesser Grain Borer is breeding strains that are resistant to organophosphorus treatments, and some Flour Beetles and Saw-tooth Grain Beetles are adapting to maldison and fenitrothion. The Wellcome Solution is smarter: BRM together with internationally proven Reldan, will control all the pests that will have a go at your stored grain.

In the same way as regular insecticide applications selected for resistant insect strains, reliance on herbicides to destroy weeds eventually bred troublesome

⁷¹ Grain Elevators Board of New South Wales, *Bulk Wheat*, vol. 8, October 1974, p. 2.

⁷² Peter C Bruce, in Grain Elevators Board of New South Wales, *Bulk Wheat*, vol. 10, October 1976, p. 2.

⁷³ Scott, *Seeing Like a State*, p. 287.

⁷⁴ Wellcome Australia Limited, 'Will smart insects inherit the earth?', in Grain Handling Authority of NSW, *Bulk Wheat*, 1985, p. 62.

populations of resistant plants. At the end of the twentieth century, Australian farmers found formerly powerful herbicides increasingly ineffective. Populations of silver grass, rye grass, barley grass, wild oats, wild radish, capeweed, Paterson's curse, and other weeds had developed immunity to herbicides. The list of herbicide resistant weeds grows each year.⁷⁵ Resistance threatens the productivity of modern farming systems. Heavy infestations of wild oats can slash cereal crop yields by seventy percent.⁷⁶ Herbicide resistance in annual ryegrass populations is especially problematic. Annual ryegrass was once a popular pasture species. As grazing paddocks gave way to cropping in the final decades of the twentieth century, annual ryegrass became unwanted, a weed competing with crop plants for moisture and sunlight. Annual ryegrass spreads profusely and holds remarkable genetic variability.⁷⁷ Dense populations of ryegrass are likely to contain numbers of plants with resistance to different herbicides. Repeated spraying fosters the rapid spread of herbicide resistant annual ryegrass and other resistant plants. As herbicides kill neighbouring plants lacking resistance, resistant individuals thrive, set seed, and spread.

In 1947, philosopher Max Horkheimer described rebellious responses of natural systems to industrial strategies of control as 'the revolt of nature'.⁷⁸ Soil acidification, dryland salinisation, the spread of sifton bush, plant and insect resistance to chemicals, and other phenomena active on the western slopes may be understood as expressions of revolt by natural systems against the modern quest for mastery over farmland. Natural forces and living systems are complex and dynamic, not simply passive and controllable. As the demands of industrial, export-oriented agriculture intensified in the second half of the twentieth century, natural agencies responded vigorously to scientific and technological methods of farmland management. Strategies to eliminate barriers to primary production evoked bigger challenges, louder expressions of revolt. New, pow-

⁷⁵ Grains Research and Development Corporation, 'Herbicide resistance in weeds', www.grdc.com.au/growers/as/herbicide_resistance.htm, accessed September 2003.

⁷⁶ 'Herbicides losing wild oat 'punch'', *The Land*, 4 October 2001.

⁷⁷ Stephen B Powles, 'Evolution in Action: Genes endowing multiple herbicide resistance in *Lolium rigidum*', paper delivered at the XIX International Congress of Genetics, Melbourne, July 2003, www.geneticscongress2003.com/index.php, accessed September 2003.

erful technologies and more strident interventions escalated the scale of natural responses. Revolt by the living systems of agricultural regions was inevitable. As environmental historian Carolyn Merchant observes, 'the tighter the rein, the greater the potential for rebellion.'⁷⁹ Early in the twenty-first century, agricultural and environmental scientists help farmers find 'solutions' to ecological disorder, another barrier to production. To strengthen farmland and regenerate rural places, perhaps a deeper process of reflection and reform is needed. In modern agriculture, the dominant notions of 'natural resources' and 'management' suggest the persistence of problematic industrial mindsets.⁸⁰

Drawing on the work of Max Horkheimer, Carolyn Merchant identifies two dimensions of the revolt against the industrial domination of 'external nature'—land and other species—by 'internal nature'—our human imagination and will. One involves the ecological rebellion of external nature. Agricultural examples of revolt by the living systems of external nature include soil acidification and chemical resistance by plants and insects. The second dimension of natural rebellion Merchant identifies is revolt by humans themselves—by our internal natures—against modern efforts at mastery. Industrial and economic 'rationality' demands repression of human emotion and sensuality. To achieve mastery over land and other species, people must adopt narrow, constrained understandings of the human condition. On the southwest slopes, some colonists rebelled against the self-limiting demands of industrial culture.

Late in the nineteenth century, ecological wounding imposed by agricultural development disturbed Mary Gilmore. The poet acknowledged her distress in 'I Saw the Beauty Go'.

I saw the beauty go,
The beauty that, in a stream,
Flowed through the breadth of the land

⁷⁸ William Leiss, 'The Domination of Nature', in Carolyn Merchant (ed.), *Key Concepts in Critical Theory: Ecology*, Humanity Books, New York, 1994, p. 61.

⁷⁹ Carolyn Merchant, 'Introduction', in Carolyn Merchant (ed.), *Key Concepts in Critical Theory: Ecology*, Humanity Books, New York, 1994, p. 4.

Like the fenceless foot of a dream.⁸¹

Mopokes (**ngugug**, **bugbug**, *Ninox novaeseelandiae*) called on moonlit nights as farmland spread, 'And the curlew made her pleas.' Seeking mastery, agricultural colonists refused to hear or respond to the voices of the land.⁸² Settlers erased components of rural places considered useless or troublesome:

I saw the beauty go,
The beauty that could not be tamed;
But before it went it looked at me
With the eyes of the maimed.

Colonisation demanded avoidance of intimate emotional ties with the native life of the land, with the web of lively relations erased and disordered by farming practices. Meeting the wounded gaze described by Gilmore would have undermined the political and industrial project of agricultural development. Imperial and economic imperatives disabled negotiation and compromise between settlers and places. Ringbarked forests died. Steel ploughs buried grassy swathes. Cultural historian Paul Carter describes the process of 'ungrounding' necessary for colonisation to proceed.⁸³ 'To be groundless', Carter explains, 'was to masquerade as being everywhere: the colonial mind was a citizen of the entire intellectual world, atopic, occupying the transcendental plain of its own reason.' Colonists imagined themselves as physically and emotionally divorced from local particularities of nature. 'Essentially, to be ungrounded was to lose touch with one's human and physical surroundings; it was to become an echoing shell, an antenna eye.' Carter considers it unsurprising that these 'unnatural circumstances' induced nostalgia for the colonised and distanced 'Other'.

⁸⁰ See 'Transcendence and war', Chapter One.

⁸¹ Gilmore, *The Passionate Heart*, p. 191.

⁸² See 'Unremembered voices', Chapter Five.

⁸³ Paul Carter, 'Turning the Tables—or, Grounding Post-Colonialism', in Kate Darian-Smith, Liz Gunner, and Sarah Nuttall (eds), *Text, Theory, Space: Land, literature and history in South Africa and Australia*, Routledge, London, 1996, p. 30.

On the southwest slopes, colonists appeared to yearn for cultural and emotional connectivity with the same grassy woodland species and natural patterns they devalued and destroyed. Perhaps, as Paul Carter suggests, few settlers were fully committed to the powerful agendas of colonisation. In the 1930s at Junee, the Jeffs Brothers flour milling company named a line of self-raising flour 'Curlew' after the bush stone-curlew.⁸⁴ Across the region, the ground-dwelling bird disappeared as wheat paddocks replaced its grassy woodland habitat. Flour bags showed a lone curlew beside tussocks of grass.⁸⁵ In 1937, a plant breeder at the Temora Experiment Farm likewise named a new strain of wheat 'Curlew'.⁸⁶ After World War Two, as agricultural systems intensified, wheat breeders in New South Wales gave new wheat varieties the names of other bird species threatened by broadacre farmland development: Rosella, Plover, Thornbill, Brolga, Currawong, Pardalote, Babbler, and Diamondbird.⁸⁷ In a similar fashion, oat varieties grown today in southern Australia are named after native animals dependent on fallen timber and grassy woodland plants for survival: Echidna, Bandicoot, Wallaroo, Quoll, Glider, Possum, Bettong, and Potoroo.⁸⁸ Perhaps the naming process indicates subliminal recognition of inescapable ties between human bodies and enveloping natural domains. Did western assumptions of disembeddedness and industrial quests for transcendence evoke haunting desires to acknowledge human bonds to the wider living systems of agricultural regions?

An illuminated manuscript prepared in 1925 by artist Gordon Nicol presents Banjo Paterson's poem 'Song of the Wheat' amid bright and colourful designs.⁸⁹ The poem celebrates the spread of agricultural settlement across the grazing estates of the southwest slopes. 'Yarran and Myall and Box and Pine—'Twas axe and fire for all', Paterson wrote. On the manuscript, Nicol painted a kooka-

⁸⁴ H D Evans and N C Proud (eds), *Back to Junee*, Back to Junee Committee, Junee, 1947.

⁸⁵ Morris, *Junee: Speaking of the Past*, p. 103.

⁸⁶ S L Macindoe and C Walkden Brown, *Wheat Breeding and Varieties in Australia*, New South Wales Department of Agriculture, Sydney, 1968, p. 91.

⁸⁷ F E Stanton (ed.), *Bust, Boom and Bust: Some Reminiscences of Wheat and Wheat Breeding in Australia*, Department of Agriculture, Sydney, 1984, pp. 106-107; and F J McRae, *Winter Crop Variety Sowing Guide 2001*, NSW Agriculture, Orange, 2001, p. 11.

⁸⁸ 'Oat variety sowing guide for 2003', Primary Industries and Resources SA, fact sheet 9/86/03.

burra, waratah (**waradhaa**, *Telopea* sp.) blossoms, different varieties of wattle, correa, violets, grain-filled heads of wheat, a bunch of grapes, and other native and imported specimens. As well as implying a longing for life destroyed, the kookaburra, wattle, and waratah were also popular floral motifs of New South Wales and the Australian nation. During the 1920s and 1930s, farmers on the western slopes grew Waratah, Federation, and Free Gallipoli wheats.⁹⁰ The names of these and other wheat varieties reflected the state and national imperatives driving agricultural development and ecological change, cultural and political forces against which land and people showed varying degrees of rebellion.

On the southwest slopes, revolt by settlers against the demands of industrial and national development at times took more explicit forms. Catholic priest Joseph Dwyer moved to Temora in 1912. Born at Maitland, north of Sydney, Dwyer had worked in Catholic institutions at Goulburn on the southern tablelands, Gundagai, and Wagga.⁹¹ Travelling across the Temora parish to perform Mass in small churches and homesteads, the amateur botanist marvelled over plants indigenous to the region. He regularly led services inside the homestead on Redesdale, a farm belonging to the Cooney family, northeast of Temora on the Bland Creek. Mary Morton (formerly Mary Cooney) remembered Dwyer as 'a very outgoing sort of a man'.⁹² In Redesdale paddocks the priest picked flowers and leaves of billy buttons, chocolate lilies, and bluebells (**ngarranngarran**, *Wahlenbergia stricta*) to add to his native plant specimen books. 'He loved the beauty of Nature's flora in Australia', Dwyer wrote of himself, and thought 'nowhere in the world has the God of Nature spread such loveliness to delight the eyes of mortal man than here.'⁹³ The priest led classes from the Catholic school on botanical excursions into bushland near Temora. Dwyer noticed a distinctly different red gum growing on stony ridges. Unlike other red gum

⁸⁹ Andrew Barton Paterson, *'Banjo' Paterson's Song of the Wheat: a reproduction of an illuminated manuscript by Gordon Nicol*, National Library of Australia, Canberra, 1988 [1925].

⁹⁰ Macindoe and Brown, *Wheat Breeding and Varieties in Australia*.

⁹¹ 'Dwyer, Joseph Wilfrid (1869-1939)', biography compiled by the Australian National Botanic Gardens, www.anbg.gov.au/biography/dwyer-joseph.html, accessed October 2003.

⁹² Mary Morton, conversation at Narraburra Lodge, Temora, 11 October 2002.

species indigenous to the southwest slopes (*E. dealbata*, *E. blakelyi*, and *E. camaldulensis*), the trees Dwyer found grew in mallee form, and had relatively narrow leaves.⁹⁴ Joseph Maiden and William Blakely of the Botanic Gardens in Sydney named the red gum species identified by the priest *Eucalyptus dwyeri*, commonly known today as Dwyer's red gum or Dwyer's mallee gum.⁹⁵

In 1921, while Bishop of Wagga Wagga, Joseph Dwyer published the results of a local floral survey in the *Australian Naturalist*, a popular botanical journal.⁹⁶ Across a wide area either side of the railway line between Temora and Wyalong, Dwyer recorded three hundred and thirty-seven different plant species. As Temora historian Laurel Thompson observes, crops and pastures now cover the land Dwyer surveyed.⁹⁷ His floral survey is a rare and valuable record of biologically diverse plant communities erased by agricultural development. Broadscale clearing troubled Dwyer.⁹⁸ He feared declining rainfall and shortages of good milling timber. Others in the Temora district shared his concerns. In 1931, local historian Watson Steele noted the loss of 'beautiful cypress-pine belts' once stretching between Barmedman and Coolamon, west of Temora. It was wrong to destroy so much pine forest for agriculture, Steele argued, 'for not only has it become very valuable, but stock require shade and shelter, and it retains a certain amount of moisture in the soil.'⁹⁹ Joseph Dwyer wished for settlers to embrace native plants. 'It is a pity the gardens and parks are not planted with many of the shrubby wattles, which adorn our wild bushlands, but will soon be as extinct as the dodo', he wrote. There were many 'beautiful shrubs' in the region suitable for garden plantings, like the feathery-leaved Wyalong wattle (*Acacia cardiophylla*), Dwyer noted in 1933, 'but lovers of the wild things should try to propagate some of them before the vandals burn them all.'¹⁰⁰

⁹³ Joseph Dwyer, quoted in Sylvia Walsh, *Dr. Joseph Wilfred Dwyer D.D., first bishop of the Diocese of Wagga Wagga*, privately published, Wagga, 1978, p. 16.

⁹⁴ Stelling, *South West Slopes Revegetation Guide*, p. 240.

⁹⁵ Cunningham et al., *Plants of Western New South Wales*, p. 528.

⁹⁶ Joseph W Dwyer, 'A Floral Survey of the South Western Slopes of N.S.W. round about Temora and Barmedman', *Australian Naturalist*, vol. 4, July 1921.

⁹⁷ Laurel Thompson, 'Berrin Berran (The Place of the Grey Box Trees)', in *Temora Yesterday and Today 1880-1980*, Temora Centenary Historical Book Committee, Temora, 1980, p. 17.

⁹⁸ Walsh, *Dr. Joseph Wilfred Dwyer D.D.*, p. 16.

⁹⁹ Steele, *Temora's jubilee souvenir (illustrated)*.

¹⁰⁰ Joseph W Dwyer, 'Wattles', *Australian Naturalist*, vol. 9, June 1933, p. 12.



Bob Glanville lent me a tape recording of his great uncle, Arthur McGuiness, talking in the 1960s to Janet Mathews, a respected ethnologist and linguist. I played the tape one winter morning while working in the garden. Mathews hoped to secure on tape fragments of language and culture offered by the old Gudhamangdhuray clansman. Arthur McGuiness told her that he was born at Cootamundra and spent his childhood there. The place was his 'native home', his 'ngurambang'. In Wiradjuri, 'ngurang' means 'camp' or 'home'. 'Ngurambang' is formed when the suffix '-bang' is added to a modified form of 'ngurang'. The suffix intensifies the meaning of the word it joins. Ngurambang is spiritually deep terrain, a belonging place, country. When people are conceived they emerge from inside their ngurambang, out into the visible world. People return inside their ngurambang when they die.¹⁰¹ Similar words with the same meaning exist elsewhere in Australia, reflecting bonds of shared culture across the continent. Pintupi of the western desert, for example, say 'ngurra' for 'camp', 'country', or 'place'.¹⁰²

Late in the interview, Janet Mathews asked Arthur McGuiness to sing a song. He was reluctant to perform alone, without accompanying singers and instruments. But Mathews was persistent. McGuiness began singing a song his father taught him as a boy. On a ladder pruning a grapevine, I stopped work and gazed over red gums and fence lines, across the upper reaches of Muttama Creek. The deep and resonant voice of Arthur McGuiness rose steadily from the tape recorder, a shifting rhythm. In the valley below, winter sunlight dissolved morning fog. The old man sang only a few lines of a song perhaps composed in firelight beside Muttama Creek swampland. The song was about a wicked and treacherous boy, McGuiness told Janet Mathews. 'I would love to' he began,

¹⁰¹ John Rudder and Stan Grant, Wiradjuri language classes, 2001 and 2002, Charnwood, Canberra; and email correspondence with John Rudder, 4 December 2003.

¹⁰² Fred R Myers, *Pintupi Country, Pintupi Self: Sentiment, Place, and Politics among Western Desert Aborigines*, Smithsonian Institutional Press, Washington, 1986, p. 48.

then stopped. 'My sister, she's dead and gone. She could sing.' Mathews encouraged him to sing another song. Arthur McGuinness resisted: 'No, no really I couldn't.' The recording ended abruptly but the tape played on, clicking and hissing into cool air.

One warm spring afternoon several years later, I parked beside the railway line near the eastern edge of Cootamundra. River red gum saplings rose from a depression between the road and the railway, where rainfall and run-off pools. I walked under the railway bridge, sturdy enough to support trains heavy with grain and other freight. Decorated in graffiti, thick slabs of concrete made the shaded space cooler. My dog splashed into Muttama Creek. Algae and plastic rubbish floated in murky water. A short distance upstream, I passed barbeques and picnic tables in a public park beside a waterhole. Nearby, children played on a tractor and hay baler, antique farm equipment painted green, yellow, and red. The tractor is a Massey-Harris, manufactured in Britain or Canada and exchanged for primary produce of inland Australia.¹⁰³ Together, the railway bridge, polluted creek, and old equipment speak of a global dynamic of history and ecological change.

Behind the former district hospital, under the shade of weeping willow, orange nylon rope tied to the wire netting of a submerged yabby trap lay alongside water couch. Elm, prunus, willow, and phalaris formed a screen on the opposite bank. Further along Muttama Creek, near the public swimming pool, I noticed earth cracked and dry, perhaps a remnant of swamp bed. Earthworks and stormwater pipes ensure winter rains rarely saturate parts of Cootamundra where swampland once extended, the lost watery expanse Gudhamangdhuray clanspeople reserved for turtles.¹⁰⁴ Further upstream I walked away from Muttama Creek. Near the High School, a footbridge crosses a wide floodwater drain bulldozed across the flat. The grassy depression leads excess water straight towards the creek, away from homes, gardens, and public buildings.

¹⁰³ See 'Pathways', Chapter Two.

¹⁰⁴ See Introduction.



Excavated channel of Muttama Creek, northwest outskirts of Cootamundra, December 2001.

My dog and I jumped a low fence of wire netting and set out across the High School oval. A band was rehearsing in an upstairs schoolroom. The sound of drums and electric guitar reverberated across the dry sports field. I sat on a wooden bench and my dog panted in the shade of a redbrick wall. The strident voice of a young woman, the lead singer, carried throughout the spaces of the school. She sounded angry and restless: 'Something has to change, it's not a burden any one can bear. It's not enough! I need more! Nothing seems to satisfy! I don't need it. I don't want it. To breathe, to feel, to know I'm alive!'

The song performed by the High School band seemed linked, somehow, to the erasure of the turtle swamp, and to the song performed by the elderly Gudhamangdhuray clansman Arthur McGuiness. The voice of the old man seemed to rise from the valley, from Muttama Creek swampland. The voice of the young woman seemed to come from somewhere else, from an unnatural, wounding space between settler culture and local earth. Industrial technologies—railway lines, bitumen roads, Murrumbidgee water pipes, fibre optic cables, steel fences—are imposed over the terrain of the southwest slopes. Connectivity between human lives and dynamic places is denied, responsive and careful relations blocked. Few stories or songs acknowledge the distinct patterns of rural places and the reality of human embeddedness in living systems. Beside Muttama Creek, the streetscape of Cootamundra appears to hover above the land. From the space in between, sometimes, there comes a yearning, natural cry of human revolt.

Regeneration

Healing

Across the particularly fertile and productive region of the southwest slopes, places relatively unmarked by industrial agriculture and freely open to the public are rare. In 1893, the Department of Lands set aside a steep, forested area beside Cootamundry Creek as a recreation reserve for the people of Cootamundra.¹ Now known as Pioneer Park, the granite porphyry hills of the reserve are cloaked in biologically diverse bushland. For townspeople without access to rural properties, the forested expanses of Pioneer Park are particularly valuable. Alec Hansen first walked across the stony hills in 1946 while visiting family in town.² The following year, Alec moved to Cootamundra from his childhood home on the southern outskirts of Sydney.

Alec and I walked through Pioneer Park one spring morning, past stringybarks and spearwood wattles. When Alec noticed a particularly interesting plant or animal, our walking and talking stopped. As we moved uphill he spotted a common fringe myrtle (*Calytrix tetragona*). We left the track to take a closer look. At the end of flowering, Alex explained, the petals of *Calytrix* blossoms fall away, leaving an impressive display of red calyxes on the shrub. Eventually the

¹ Land and Property Information NSW, 'Parish Map of Cootamundra, County of Harden', www.lpi.nsw.gov.au/maps/pmap/search/pmap_websearch.display, accessed May 2003.

² Alec Hansen, conversation at Pioneer Park, 9 October 2002.

calyxes descend too, each with a seed attached. As rain falls and humidity rises, threads attached to the calyxes absorb moisture, causing them to twist. The turning action pushes *Calytrix* seeds into damp soil. Germination begins.

We kept walking uphill in the sparse shade of red gums. The Australian Airforce set up a base here in World War Two, Alec said, and made drastic changes. Workers cleared trees and shrubs, causing blankets of loose soil to wash downhill. When the Airforce abandoned the site after the war, the Shire Council leased Pioneer Park to local graziers. Some years later, when the Council decided to remove livestock, the bushland regenerated swiftly. Trees cut down a generation before grew back from shoots emerging at the bases of stumps. Seed from herbs, grasses, shrubs, and trees high on the granite hills washed and blew onto the bare spaces below. Over several decades, a diverse and beautiful forest community returned.

We stopped again as Alec spoke gently to a swamp wallaby (**gunirr**) paused in the shade nearby, watching us pass. *Wallabia bicolor*, Alec told me. He whistled softly to reassure the creature. We recommenced walking across the hillside through a stand of black cypress pine. The Cootamundra Shire Council recently built fences inside Pioneer Park. According to the Council, Alec said, the fences were designed to exclude young people on trail bikes from the bushland. Cattle now grazed the fenced areas inside the reserve, supposedly to reduce fuel loads and the risk of bushfires. Alec sees much damage caused by the livestock. Cattle graze and push over shrubs. He suspects cattle can smell the tubers of greenhoods (*Pterostylis* spp.) and other underground orchids. The animals unearth and eat the fleshy orchid tubers. Scent of cow dung now lingers where crisp bush smells once prevailed. Alec does not consider forested areas like Pioneer Park as 'wilderness' places from which people should be excluded. He pointed out the different paths regularly taken by a horse-riding group through the park. Alec feels sorry that town kids can no longer ride trail bikes in the bushland reserve. No harm is done if the young riders stick to tracks protected from erosion by earthworks. 'And you get some bush devotees by allowing them in', Alec said.

As we moved downhill, Alec saw a woodswallow (*Artamus* spp.) and stopped. Great flocks of the smoky brown birds, he explained, journey annually from northern Australia to nest in southern forests. We reached a basin at the base of the slope and walked into an established grove of Cootamundra wattles. Years ago, Alec came to this sheltered place with a nephew who was leaving town. They planted a wattle together. Alec repeated the practice when other family members left the district. The small trees are now mature and spreading. When Alec visits the acacia grove in Pioneer Park, each wattle reminds him of the relative he planted the tree with. As we stood amid the Cootamundra wattles, Alec again abruptly stopped talking. A brown treecreeper (**bimbin**, *Climacteris picumnus*) mounting the trunk of an acacia had captured his attention. I was too slow to see the bird. Treecreepers try to escape observation and capture, Alec explained, by climbing around to the opposite side of trunks.

Alec always takes a magnifying glass when he goes bushwalking. He talked about the need to understand natural patterns close up. When his children, nephews, and nieces were young, Alec gave them a sense of familiarity with Pioneer Park bushland, its animals and insects. People, he told them, are part of wider natural processes. Ecological relations are particularly visible and active in diverse forest communities. Alec described to his young family members how eucalypts and wattles hold carbon and release oxygen. Responsible engagement with places depends on ecological consciousness, Alec believes, on personal awareness of natural interactivity. He wanted his children and junior relations to understand their physical connections to land. When they became adults, he told them, they could influence the wellbeing of places like Pioneer Park. Again, Alec stopped mid-sentence. He pointed into a wattle tree. Above our heads, a branch held a fantail (*Rhipidura* sp.) nest woven from stringybark fibres and grass.

As we returned up the slope towards the car park, Alec told me another story about Pioneer Park. For most of his working life, Alec was employed as an electrical linesman with the Northern Riverina County Council. He relished the

freedom the job gave him to encounter and engage with varied places throughout the region. Climbing an electricity pole one day in the early 1960s, Alec lost his footing and fell. He landed flat on his back. While escaping major breakages, his collision with the ground induced a debilitating condition. Alec began to suffer intense and lasting migraine headaches. To find relief, he walked into the forested hills of Pioneer Park. Alec sat under eucalypts, watching and listening to the activity of woodland life. On one occasion, he saw a willie wagtail (**dyirridyirri**, *Rhipidura leucophrys*) build a nest of spider webs and feathers. When Alec spent restful hours on the shaded and lively hillsides, his painful headaches vanished.



The Gundagai Bushcare Group began a revegetation project several years ago. Group members and volunteers replanted silver wattle (*Acacia dealbata*), blackwood (**digu, mumbil**, *Acacia melanoxylon*), river bottlebrush (*Callistemon sieberi*), kangaroo and wallaby grass, and hopbushes beside Morleys Creek, a former channel of the Murrumbidgee River. Morleys Creek traces the western and northern edges of the Murrumbidgee floodplain beside Gundagai, embracing the hillside town. Some elderly residents remember platypuses (**dungindany**, *Ornithorhynchus anatinus*) in the creek. Old red gums and river oaks stand on the banks. Cumbungi, water primrose (*Ludwigia peploides*), rushes, native umbrella sedge (*Cyperus* sp.), water ribbons (*Triglochin procera*), and other aquatic plants flourished when council workers stopped spraying herbicides to kill weeds in the channel and on the banks of Morleys Creek. Locals counted eight species of frogs and more than one hundred different birds. Young river red gums and river oaks are beginning to shade waterholes and grassy swathes.³

Thunderstorms swept the southwest slopes as I drove down the Hume Highway from Yass one unseasonably warm September evening. Near Gundagai, lightening turned night momentarily into day, revealing grassy hills studded

with elderly paddock trees, rolling terrain rising steeply beyond the busy road of semi-trailers and cars. I pulled off the highway and parked outside the Niagara café. After dinner, I walked down the main street. Warm gusts of humid air blew from the west, pushing leaves and dust past shop fronts and decorative Victorian facades. As I crossed a side street, a lively wave of sound surged from darkness below. It sounded like frogs. Unable to trust my senses, I walked a short distance down the dark street towards a waterhole on Morleys Creek. Frogs, surely thousands of them, called loudly, rhythmically, a lively roar rising into the night air above the relentless hum and thud of highway trucks.



The prominent granite hills of Pioneer Park join others on the southern and western edges of Cootamundra. John Hurley, ex-convict squatter of Cootamundra station, established the nucleus of his pastoral run here beside Cootamundry Creek late in the 1830s.⁴ A published portrait shows the absentee grazier attired expensively, hair fashionably swept.⁵ The image suggests the wealth Hurley extracted from his inland station and other business interests. My parents bought a small farm a few kilometres northwest of Cootamundra in 1977. Exactly one century before, the extension of the Great Southern Railway to Cootamundra had sparked the spread of farmland across local pastoral estates and the eviction of Wiradjuri families and individuals from old station camps. When Hurley held Cootamundra station, his sheep probably camped on top of the steep granite hill at the centre of our farm, above paddocks where my mother grazes beef cattle. Winter nights are warmer up there, frosts lighter.

Few trees grew on the hill at the end of the twentieth century, just a scattering of mature stringybarks, red gums, and bundy box (*Eucalyptus goniocalyx*), a single kurrajong, and several ancient, broken she-oaks. Stringybark trunks carried

³ Mason Crane, telephone conversation, 20 January 2004.

⁴ See 'Returning to Cootamundra', Chapter Three.

⁵ Everard Digby (ed.), *Australian Men of Mark*, vol. 2, Charles F Maxwell, Sydney, 1889, opposite page 103.

angry orange wounds where cattle had nibbled and torn away the fibrous red bark, a process threatening to ringbark and kill them. Apart from a handful of bundy box saplings, no young trees grew. About a decade ago, one drooping she-oak seedling emerged from summer grasses and escaped the mouths of sheep and cattle for a year or two. Across the stony hill, many stumps and logs indicate a recent history of forceful change.

'We were such fools', our neighbour Joe Manning told me.⁶ Ringbarkers worked over the hill generations before Joe cleared the granite rise of dead trees and forest regrowth in the 1950s, when it was part of his family property 'Woodburn'. Joe led a draught horse up the slope to pull the weathered trunks down. With a fire established, he shovelled red coals between stumps and fallen timber. Joe ringbarked the saplings. He poured poison from an old kettle into the axe wounds of eucalypts to ensure the young trees would not sucker. Stock loved the stony hill, Joe remembers. It was 'sweet country'—sheep and cattle found grasses and herbs growing amid the rocks especially palatable. More pasture grew once the living trees were gone. In nearby paddocks, Joe cleared other scrubby and regenerating stands. New, powerful machines made clearing an easy task.⁷ Across the district, kangaroo grass and other native forage plants vanished as landholders spread phosphate fertilisers and developed more intensive farming methods. Regretfully, Joe noticed unforeseen consequences. Noisy flocks of green budgerigars (*gidyirrigaa*, *Melopsittacus undulatus*) disappeared. Curlews no longer wailed at night.

Where the slope of the granite hill eases, a bare expanse of salty earth appears to be spreading. Without a diverse mix of trees, shrubs, and grasses, the hill can no longer keep rainfall from watertables below. A few years ago we successfully applied for a grant from the Department of Land and Water Conservation to fence the hilltop and its stony slopes from stock. Three rows of barbed wire above two strands of plain give kangaroos and wallabies easy access. The winter after fencers enclosed the hill, people came to help plant trees and shrubs, to

⁶ Joe Manning, conversation at Little Dale Lodge, Cootamundra district, 28 December 2002.

⁷ See "Fighting timber", Chapter One.

camp on a sheltered flat and celebrate the work. We spent two days finalising our preparations for the event. I had grown bundy box, early wattles (*Acacia genistifolia*), and drooping she-oaks from seed collected on the farm. A revegetation nursery supplied other plants propagated from local stock—violet kunzea (*Kunzea parvifolia*), prickly tea-tree (possibly **mudha**, *Leptospermum continentale*), narrow-leafed hopbush (*Dodonaea viscosa*), western silver wattle (possibly **garal**, *Acacia decora*). We bought thick sausages and chops for the barbecue, split green peas and bacon bones for soup. I revved up the chainsaw and cut heavy lengths of red gum for campsite fires.

A cold, gusty change swept the southwest slopes the night before people arrived. The Bureau of Meteorology issued a sheep graziers' alert and predicted snow on the mountains, even along the tablelands. I climbed the windswept hill in the morning. Cold rain blew across the slope. Swinging a hoe, I cleared patches in the wet surface of grasses and weeds—hundreds of sites for young plants. I put a seedling guard beside each circle of shaved earth. Loose granite stones held the plastic and cardboard sleeves from the wind. Next morning people would lower the guards around bamboo stakes hammered into the stony earth beside each plant, offering seedlings protection from rabbits, hares, and summer winds.

The previous spring we had planted hundreds of dark green and feathery-leafed Deane's wattles beside the intermittent watercourse below the hill, inside another area fenced to exclude livestock. About a third died when summer came early. I walked down to the watercourse later that wintry afternoon, after I had finished preparing the planting sites on the hill. I carried a wheat bag to collect plastic guards and bamboo stakes from around the dead wattles, for re-use uphill the next day. I passed a place where I once found a hand tool beside a cattle track, a pale flake struck from fine-grained stone, narrow and sharp. As a child I spent days down here, unearthing old domestic rubbish somehow entombed in the gully wall. I found glass bottle tops, roughly turned ceramic inkwells, and a rusted saucepan holding a peach stone. Oddly, there were no

visible remnants of any dwelling. On the nearby hillside, I once found a sulky step on top of a stone pile, geometric designs stamped into its footplate.

In search of dead wattles and surplus guards, I reached a point where churning water had carved a broad, deep basin. A piece of green plastic lay inside the hollow, lifted and carried from bamboo stakes by a brisk wind. I negotiated the steep bank, stepped across the gully floor, and shoved the guard into my wheat bag. An old stringybark tree fell into the watercourse here years ago, as soil around its roots washed away. Branches pointing skyward grew tall and sturdy, like a line of saplings. I paused. Other mature stringybarks—wide trunks dark in the evening gloom—stood quietly above the sheltered depression. My lips burned, swollen by hours of exposure to cold, biting wind. I felt the slopes of the stony hill in my legs and the weight of red gum branches in my arms. Clouds glowed purple in the darkening sky. Time, place, stringybarks, growing wattles, dead wattles, all seemed to whirl and blend before me and through me, as I stood in the earthy basin, tired and hopeful.

Jo and Graham arrived after nightfall with Roi and Mareve, Israeli backpackers working for a few days on Graham's farm near Narrandera. We unloaded five hundred seedlings—drooping she-oak and stringybark—thriving in black plastic trays. Graham had grown the young plants from seed collected on the dark hillside beyond the house, where cold wind whispered in the crowns of elderly trees. In the morning more people came, parked beside the fence, and walked up the slope to help plant. Rain clouds had vanished overnight but the firm westerly kept blowing. In the clear winter air we planted on the eastern slope, angled to the morning sun and out of the wind.

Hazel brought Mohammad and Assad, Afghani refugees. Like other members of the Hazara minority group, the young men had suffered persecution under the Taliban leadership. They fled to Australia, arriving by boat on the northern shoreline and claiming asylum. The Federal Government detained Mohammad and Assad inside a detention camp at Woomera in the South Australian desert. After months of waiting, immigration officials finally granted them temporary

protection. The two men, skilled tailors, found work in a Cootamundra sheep-skin factory making boots.

Mohammad seemed cautious as we ate lunch, thoughtful. Someone asked him about the English language classes he attended with Assad at the local technical college. Their English was improving, we told them. I mentioned that Wiradjuri language lessons had just started in Cootamundra. Mohammad did not seem to understand that a cultural group other than the descendants of British settlers had a presence in the region. My mother tried to explain. 'There were Aborigines here, then they were cleared off the land', she said, awkwardly. Across the wide gulfs of difference separating Assad and Mohammad from my people and myself, no proud or comforting settler myths held ground and gave shelter. The two young men know the trauma of dispossession and violence. They sat silently.

Back on the hill, Melissa heaved a tall iron crowbar vertical to the sky and it fell with her weight into damp stony earth, making a dull sound of metal on stones held loosely underground. She repeated the action, levering soil and granite rocks aside to make space for a stringybark sapling glowing rosy and green at her feet. Roi and Mareve worked away, pressing dark earth around the naked roots of a juvenile bundy box, threading bamboo stakes through a plastic guard. Nearby, rock ferns (*Cheilanthes* spp.) and lomandra crept out from stony crevices into winter sunshine. For so long, sheep and cattle had kept the plants trimmed back. After the fence went up and livestock were excluded, shoots and leaves emerged also from the bases and lower branches of elderly red gum, stringybark, and bundy box trees. On the eastern side, where Joe Manning and earlier ringbarkers had left a clump of trees alone, limbs running close to the ground were now bushy with growth. Fresh bursts of blue foliage closed the gap between upper branches and the ground, a space formerly kept nibbled open by livestock. The new growth offered animals and plants rare shelter from winter and summer winds.

At the end of the short winter day, as the sun lowered and lost its warmth, Roi and I walked over the hilltop to retrieve tools left behind. Roi told me about his tiny garden of fruit trees beside his home in Israel. He swept his arms out and said how lucky my family was to have all this space. I tried to say something of the history that led us here. I turned and pointed south towards Mount Ulandra, its forested bulk darkening as night came, and said I knew a story of killings there. On Yammатree station beside Mount Ulandra, settlers once executed a number of Aborigines for stealing livestock, a descendent of Yammатree's pioneering family told me.⁸

The sun vanished behind a line of hills studded with elderly red gums. Cold wind blew on. 'Come back one day Roi', I said, 'to see how the trees are growing.' Roi laughed. Earlier in the day we had talked about his year of compulsory military training. He and Mareve would return to Israel soon. In recent months, news reporters had told many horrific stories of suicide bombers and terror, a relentless and escalating war. A tall grey stump beside us bore a ringbarking scar around its girth. Butchered limbs reached out. Nearby, a cardboard guard gave shelter to a drooping she-oak seedling, carefully watered from a plastic bucket, its tender white roots feeling the earth.

Months later, the spring weather was hot and dry. Drought again descended. Where stringybark saplings poked out above guards, fierce westerlies curled soft leaves brown and crisp. Hungry kangaroos pushed the green plastic sleeves down to nibble drooping she-oak leaves. According to botanist Joseph Maiden, thirsty settlers without sufficient water supplies chewed the dark green strands. Acid in the leaves generated saliva and relieved thirst.⁹ Perhaps marsupials found the same. Over summer, I drove to Cootamundra once a month from Canberra to water the dwindling population of young trees and shrubs. Weighed down by a fire-fighting tank filled with water, the ute made firm tracks through the blond expanse of wild oats and red grass. Buckets spilled as

⁸ Mark Jenkins, telephone conversation, 13 February 2003.

⁹ Maiden, *The Useful Native Plants of Australia*, p. 15.



Mareve places a plastic guard around a bundy box seedling, Treetops, Cootamundra district, June 2002.

my parents and I stepped over rocks towards seedlings. One night I dreamt of rain, the stony hill cloaked in green, wet grass.

Ossie Ingram was born at Erambie mission beside the Lachlan River at Cowra in 1922 and grew up in the Narrandera district.¹⁰ In the 1980s, the Wiradjuri elder told a story about Muri, 'a maiden of the mist' who fell in love with the north wind.¹¹ As wind blew from the north, the story goes, rain clouds gathered and broke, filling waterholes and offering Muri abundant moisture. Then winter approached. A cold wind started to blow from the south, competing with the north wind for Muri's attention. The bitter southerly blew and blew, blocking the northerly wind, preventing rain, and banishing warmth and life. As moisture disappeared from billabongs and the land, Muri turned cold and died.

I thought of the story told by Ossie Ingram the February after planting, when a firm, warm northerly swept the southwest slopes and southern tablelands for three days. Weather charts showed an intense low-pressure system approaching from the west. Circular isobars traced the clockwise path of winds. A large body of unusually moist air channelled down from central Australia. I visited the Bureau of Meteorology website, and found the current rainfall map generated by radar from Wagga. Wide, mottled bands of grey, blue, and yellow drifted eastwards, signifying copious, gentle rain.



The village of Oura sits on a hillside beside the Murrumbidgee River, upstream from Wagga. Elderly river red gums rise from a floodplain area reserved for recreation and travelling stock. Janu needed long ropes to bind floodlights to

¹⁰ Bill Gammage and Peter Spearritt, *Australians 1838*, Fairfax, Syme & Weldon, Broadway, 1987, p. 118.

¹¹ Ossie Ingram, in George Day and Julie Follett (eds), *Aboriginal Arts in Transition*, NSW Department of Education, Wagga Wagga, 1988, p. 49.

the wide girths of ancient eucalypts around the campsite. At night, branches and leaves glowed lime green and red. Weeks before, an Oura resident had driven a tractor with a ripping blade along parts of the reserve selected for planting. The device tore furrows into grey floodplain earth. In spring sunshine, we followed the lines across the uneven plain, planting thousands of river oak, bottlebrush, and red gum saplings. It was easy to imagine floodwater lapping at eucalypt trunks, receding through fallen branches and grass tussocks as frogs called and waterbirds foraged for yabbies—a regenerative event denied by dam walls of concrete and steel in steep gorges and mountains upstream.

Graham wore a T-shirt designed by April, inscribed 'Community, Regeneration, Celebration'. April talked about connecting with elements of nature sure to remain active far beyond human life spans, and celebrating those bonds with dance. 'To be taken out of working at a desk during the day and going and planting a tree and thinking this is going to grow, hopefully, and be as big as these other trees. It's the interaction with the earth, and then you come and you dance.' Jo spoke of a need for time and quiet to listen as people have for so long here. 'Just that Aboriginal idea of the land constantly singing a song to you to explain how it works and how you can operate in harmony with it', she said. 'You just have to listen to it, learn how to listen to it.'¹²

As evening came, red gum branches burning on the riverbank gave warmth and light. Overhead, pairs of wood ducks (**gudharang**, **guwiyarrang**, *Chenonetta jubata*) and noisy cockatoos returned to nests and roosts. Janu fed Australian birdcalls from an old vinyl record into the mix of electronic trance music. Beside the fire a cattle dog sat up, ears pricked, as speakers cast willie wagtail chatter, wood duck calls, and the aching cry of a crow across the darkening floodplain.



River red gums in morning light, Oura recreational reserve, September 2001.

Conversing with place

One autumn afternoon, my father and I stood beside a public road skirting a back paddock of Ardrossan. An old grey box tree threw shade across the uneven ground and tussocks of native grass between the boundary fence and the bitumen. On the other side of the wire netting, open farming paddocks stretched north and west. I held my tape recorder. My father tried to describe his recurring dream of the place before us. He grasped for words to capture images shifting at the back of his mind:

In my dream the trees seemed to be taller and thicker, and possibly not so long dead. But very noticeably with areas throughout the timbered area where there were carved trees, or buildings built out of the trees, or in the trees. There were things built on the trees, too, I suppose, remnants of boards being fastened on trees in a significant sort of a way. And certainly carvings in the trees—but, my memory is more sort of European-type things than Aboriginal-type things, and a quite weird sort of a feeling. Because even though I was there in them, they sort of weren't there, in a way. Sort of the hidden corner you walk around and there's a memory there you didn't think was there.¹³

Four decades ago, a ringbarked forest of yellow and grey box trees cloaked these paddocks beside the road. My father remembers broken trunks rising from rough ground. Ringbarkers had killed the eucalypts generations before, when Ardrossan was part of Retreat station. Corriedale sheep grazed native grasses and herbs among rotting trunks and limbs. Workmen regularly collected truckloads of the weathered timber. Beside the homestead on Retreat, a neighbouring family property then managed partly in conjunction with Ardrossan, the men spent days cutting firewood with a circular saw driven by a tractor. Fertilising contractors bounced old trucks across the uneven paddock, spreading superphosphate over native clover (*Trifolium* spp.) and grasses. Sometimes when the truck hit a large stump or a gilgai, the person standing on the tray pouring fertiliser into a hopper was thrown to the ground.

¹² Jo Roberts, conversation at Oura recreation reserve, 23 September 2001.

¹³ Jim Main, conversation at Ardrossan, Dirnaseer district, 7 April 2002.

The wide stand of decaying trees on Ardrossan embarrassed my father's family. By the 1960s, most landholders in the Cootamundra and Temora districts had cleared remaining patches of dead timber and sown cereal crops and imported pasture species—they had 'cleaned up their country', my father said. So he and a neighbour fastened a bulky chain between two tractors. Dead trees fell as the diesel machines strained in tandem. The men used the tractors to drag and push the brittle wood into heaps for burning. My father remembers a feeling of satisfaction and accomplishment as he ploughed the paddock for the first time. 'I'm building something here, I'm developing something', he thought. 'This is good, this hasn't been done before, this is the way forward.' Creating spaces for industrial futures requires erasure of the particularities that define places. Machinery groomed the paddock. Grey logs, native grass tussocks, and stump holes vanished. Ploughs and crop-seeding equipment erased a series of ancient mounds my grandfather called 'gins' graves'. The humps were probably natural formations, my father thinks, but he cannot be sure. His family never talked much about local history.

I asked my father to describe the feelings of his recurring dream about the paddocks extending in front of us. He spoke about mystery and a severance of connections:

A sense of loss, I think. Maybe just a sense of nostalgic loss. No, I think it was a bit more than that. There was a loss of something of significance. And I think it possibly did relate to those trees. Because there was some link with them that was certainly gone when we cleared them. A link with another reality, a past, a thing that was long past. There was a visible, tangible link. The trees were evocative of things past, but things not particularly clearly identified.

Something more than dead trees and uneven terrain disappeared from the land my father and our neighbour cleared. Maybe a sense of vanished potential for dialogue and connectivity keeps evoking the haunting dream. Tractors and ploughs erased intricate patterns—cultural and natural. Burying native clover and grass, constructing blank, industrial space, silencing history, the action

eliminated opportunities to comprehend and work inside a dynamic local ecology. Possibilities evaporated for new, mutually nourishing relations. When my family sold the farm late in the 1970s, we lost any chance of finding alternative ways to engage with the paddocks of Ardrossan.

Later, my father remembered a second recurring dream of the same place. Moist and alive, the woodland in this dream offers life and security. Painful feelings infuse the dream:

In my dream I am walking through the area, realising we have sold it and that I am trespassing. The area is timbered again, though in my dream I remember it as always being timbered. The trees are mature and there are understorey plants. I don't know in my dream what types of trees and plants but I have no curiosity about this. It is always wet though not raining. The timber is not dense but there are enough sight breaks and clumps of trees to make me feel reasonably secure from being seen. It is a fecund area. But no people, (except me) only plants. There is a sense of loss because I know I will have to leave soon.¹⁴



Just west of Birrego, a farming district south of Narrandera and the Murrumbidgee River, gentle slopes settle into the Riverina plains. Here, on the dry margins of the southwest slopes, sparse columns of white cypress pines and dark green globes of kurrajong trees rise from paddocks of wheat and sheep. A small timber church marks the centre of the Birrego district. Mosaics of wattles, native grasses, and eucalypts grow along road reserves.

The sparse foliage of hooked needlewood (*Hakea tephrosperma*) gave little shelter from a cold southerly wind that arrived one November morning, slamming a door and waking the house. Over breakfast the radio predicted storms. Winter rains and spring warmth had nourished Birrego district crops, pastures, and

¹⁴ Jim Main, email correspondence, 22 October 2003.

roadside grassy woodland remnants. Crops and native plants stood heavy with grain. Hakea flowers resembling creamy spiders decorated the small colony of trees Penny and I harvested. 'Turn right at the church, and they're about three quarters of the way down the road, over the rise', Graham told us after breakfast, before driving away in a wheat-laden truck towards the railway silos at Boree Creek. We arrived at the needlewoods with gloves, a ladder, secateurs, buckets, and a woolpack.

According to ethnobiologist Tim Low, Aboriginal groups in central Australia harvested seeds from two species of hakea trees (*H. eyreana* and *H. suberea*). They applied ash from the powdered bark of both desert hakeas to soothe sore lips, gums, and eyes. Hakea blossoms steeped in water made a sugary drink. Increase ceremonies ensured good supplies of nectar from the flowers of the small trees.¹⁵ Aborigines in dry parts of Victoria drained water from the roots of silver needlewood (**yuri**, *Hakea leucoptera*), a close relative of hooked needlewood.¹⁶ Here at Birrego, Wiradjuri probably used and engaged with hakeas in similar ways to Victorian and desert Aborigines. Detailed knowledge survived in the central deserts and other places where colonisation was less intense. In southeast Australia, it appears relatively little is known about the usefulness and meanings of many grassy woodland species. Colonial processes erased knowledge. Settlers found no reasons to protect and nurture the spiky-leafed trees. A few specimens held on in state forests and beside dusty roads.

Trying to avoid the spiny hakea leaves, we reached into the foliage and twisted the woody seedpods away. Some pods had already offered their winged seeds to the breeze. I imagined the sturdy capsules we were harvesting opening days later inside the woolpack left in the sun. And soon, the seeds sprouting in plastic trays. When autumn rains came, Graham and other Landcare group members would plant the hakea seedlings alongside wattles and eucalypts, into

¹⁵ Tim Low, *Bush Medicine: A Pharmacopoeia of Natural Remedies*, Angus and Robertson, North Ryde, 1990, p. 159.

¹⁶ Nelly Zola and Beth Gott, *Koorie Plants Koorie People: Traditional Aboriginal Food, Fibre and Healing Plants of Victoria*, Koorie Heritage Trust, Melbourne, 1992, p. 32.

revegetation belts across farmland. Small birds nest amid the protective spiked leaves, and consume pest insects on paddock trees, crops, and pastures.¹⁷

The hooked needlewoods resisted our efforts. 'Have a look at this', Penny said. She turned over her forearms, pricked red by the sharp, curved points at the tip of each needle-like grey leaf. Two thick, curving trunks rise above the young, sturdy plants we harvested. Coloured patches of lichen decorate the furrowed bark of the venerable hakeas. I sensed an obligation to acknowledge the elderly pair of needlewood trees, to explain our hopes and actions, and to ask for permission to harvest. Perhaps we were already performing rituals, at Birrego and elsewhere: travelling long distances, the repetitive harvesting motions, daily watering seedlings in pots and trays, careful planting into prepared earth.

Grey clouds gathered to black as the cold southerly blew. We heard machinery in a nearby paddock, where the driver of a combine harvester rushed to collect a crop of barley before the storm broke. Hail and sharp downpours flatten modern cereal crops—expanses of brittle stalks holding grains heavy and swollen by artificial fertilisers. Plant breeders develop varieties suited to broadacre, mechanised production across entire regions. Farmers must meet demands rising in the global marketplace for standardised products. Modern systems of primary production are insensitive to the varying particularities of scattered rural places. In contrast, the needlewood hakeas at Birrego are integrated within dynamic local patterns of land and climate. Unlike the crops farmers grow on the southwest slopes, the small trees can survive droughts and extreme rainfall events. As the storm clouds gathered above Birrego paddocks, I noticed the hakea branches held both ripe seedpods and new flowers protected by spiked leaves. Belting hail might dislodge the blossoms, but never the woody capsules. Open foliage and forked limbs capture and channel rainfall down furrowed trunks into an absorbent groundcover of moss. Even if we greedily harvested every mature seedpod, spring rain and summer storms would quicken the growth of seeds already forming inside small green pods along each branch.

¹⁷ Stelling, *South West Slopes Revegetation Guide*, p. 329.

Old kurrajong trees stand in paddocks on Oakvale and Arcadia, adjoining Birrego district farms owned by Graham Strong and his family. Generations of wheat farming and sheep grazing have ensured no young kurrajongs emerged inside paddocks. Native shrubs and grasses able to conserve moisture and hold soil have vanished from farmland. Dead trees and salt scalds on farmland beside the road to Narrandera are obvious consequences of dramatic alterations imposed by agricultural development. Land here is wounded, destabilised. Graham rejects the 'natural resource management' discourse of 'sustainable agriculture', the rhetoric of strategies designed to maintain industrial, productionist agriculture. Graham and I talked once about the term 'regenerative agriculture'. Unlike 'sustainable', the label 'regenerative' acknowledges a painful history of disorder and loss. Rejecting the term 'sustainable' and adopting 'regenerative' invokes formidable new relationships. Opening dialogue with a subjugated and wounded entity, Graham explained, is not a comfortable process:

I sometimes feel equally awkward or uncomfortable to use the term 'Regenerative Agriculture' because it poses such a challenge to my soul and deeply confronts me and challenges me to feel, think and act deeply. The ethical obligation emerges like a tortured soul begging for recognition, love & nurturing.¹⁸

Ecological changes brought by agricultural development and monocultural production make dialogue and learning even more difficult. Local extinctions of many grassy woodland species and the simplification of natural processes block understanding of the dynamic potential of local ecologies. When conversations between people and land begin, dialogue is unavoidably erratic and halting. Colonisation destabilised local ecologies across the southwest slopes, undermining the capacity of settlers to observe and learn the natural patterns of the land. Dialogue is, nevertheless, necessary and full of promise. Monological relations of power deny human embeddedness in land, and disable learning. Nurturing rural places, and allowing rural places to nourish us, requires careful attention to the intricate patterns and particular needs of local ecologies. Dialogical relations arise from acceptance of ethical obligations to reciprocate the life

¹⁸ Graham Strong, email correspondence, 12 May 2003.

and wellbeing farmland gives to people. At Birrego, the Strong family is developing farming systems responsive to the particular histories and natural details of local terrains. Recognition of ecological and social fragmentation wrought by colonisation underlies their desire to restore natural integrity and biological diversity.

Graham wrote of the 'uncomfortable feelings' he experiences 'standing next to a 400 year old kurrajong tree in a bare paddock'.¹⁹ We talked about his encounters with elderly, isolated kurrajongs on farmland. He built a sturdy fence around one large kurrajong, enclosing a wide area around the tree. 'That was to protect it', Graham explained,

and to give it some respect and try and restore some of that dialogue, to say 'I am listening to you.' I know it's not fantastic, but at least this is a start, this fence around this kurrajong. 'At least shield you from some of the impact, at least get some shrubs growing under you so birds can come in and eat insects that are eating your leaves.' That's an initial step I can take towards establishing dialogue, and cooperation, and respect, mutual respect. 'You give me shade, you give me this beautiful tree, I can give you this back.'²⁰

Graham also feels a need to establish dialogue with local Wiradjuri people. He helped form a local Landcare group in the middle of the 1990s. Graham invited three Wiradjuri elders to the inaugural meeting. He remembers himself speaking at length. 'I wanted to show that we respected their law', Graham said, 'not that we even really knew what their law was, and that we were trying to do the right thing.' It was an awkward moment. The elders remained silent. On a separate occasion, a Wiradjuri man from Narrandera came to Oakvale homestead to ask Graham for access to the farm. The visitor wanted to collect a particular grub, excellent fishing bait, which burrows into the dead trunks and fallen branches of kurrajong trees. Graham readily gave permission, but felt uncomfortable doing so. Powerful settler notions of land ownership and control seemed to lack legitimacy. 'You feel that clash of laws', he said. Unexpectedly,

¹⁹ Graham Strong, 12 May 2003.

Graham felt nervous speaking to the visitor. He saw the Wiradjuri man as 'a policeman', someone perhaps making a judgement based on Aboriginal law. Graham yearned for dialogue: 'I felt like talking about all the ways we're trying to look after the land, you know, regenerate the trees and the natural world, and I felt I had to justify myself, that I was trying to fit in with at least elements of, through my limited understanding of Aboriginal culture, of tribal law.'

When the cereal harvest was over, Graham and I drove across the land he farms with his family. The paddocks we drove through looked different to neighbouring properties. As well as lucerne pastures and wheat crops, the Strong family has planted old man saltbush (**bulaguy, miranggul**, *Atriplex nummularia*) and native grasses across broad areas. Graham sows wide bands of acacias with the same broadacre seeding equipment he uses to plant cereals and other crops. After one pass of the wide machinery, with good rain, thirty thousand wattle seeds collected on local roadsides sprout and grow in moist red earth. Graham plants silver banksias (*Banksia marginata*), quandongs, eucalypts, and other local plant species among the wattles. Only five years after starting the revegetation work, the new and diverse expanses of native vegetation halved the volume of insecticide needed to stop pests damaging pastures and crops. The native plants harboured many insects and small birds that devoured troublesome bugs and caterpillars.

Graham pointed to several young kurrajongs rising inside a revegetation belt. The trees are fire retardants, he explained. Kurrajongs retain moisture throughout summer, and their dense foliage helps block wind and flame. Similarly, as sheep graze deep-rooted saltbush, the woody plants keep producing fresh growth in dry months. Moisture is drawn from subsoils into green leaves and branches. Between the saltbush rows, Graham is establishing swathes of summer-active forage plants like kangaroo grass. He hopes to avoid the 'dead system' that prevails across the southwest slopes between October and April, when paddocks cloaked in exotic annual crop and pasture plants turn dry and bare. Without deep-rooted, summer-active perennials, soils lose so much mois-

²⁰ Graham Strong, conversation at Queanbeyan, 13 January 2004.



Graham Strong beside a kangaroo grass tussock, Oakvale, Birrego district, May 2001.

ture even microbial life vanishes. Farmland becomes static, vulnerable to fire and erosion.²¹ The absence of perennials able to respond to summer rain allows moisture to soak down into watertables, increasing the risk of dryland salinisation. In November 2002, during a major drought, Graham showed me kangaroo grass tussocks green and growing. If a bushfire approached, he planned to gather his sheep inside saltbush paddocks—relatively moist, green expanses at risk only to unusually intense fires. Graham accepts fire as part of the local ecology. Communities of plants native to the southwest slopes, he explained, are adapted to fire. Working with the patterns and forces of the land, planting kurrajongs, saltbush, and kangaroo grass, reduces the chance of catastrophic bushfires. Windswept paddocks cloaked in dry, lifeless crops and pastures across the region in summertime invite and regularly deliver disaster.

We stopped beside a solar panel, angled to the sun. Graham had welded together a stand for the panel from an old plough disc and a segment of axle. Coloured plastic clips and coated wires linked the panel to a two-strand fence. Electrified wires bisected a paddock of saltbush and native grasses. Graham explained that he regularly transfers mobs of sheep into paddock segments bounded by the movable electric fences. Sheep intensively graze the small areas for a week or a few days, depending on the weather, available herbage, and other factors. Then the mob is shifted to another paddock segment, where over past months woody shrubs and perennial grasses have grown undisturbed by stock. As the grazed saltbush and native grass portions hold sheep for only short periods of time, roots beneath each perennial plant remain active to a great depth. Denuded shrubs and grasses respond vigorously, a capacity lost when plants are continuously grazed and only shallow roots survive. Kangaroo and wallaby grass, old man saltbush, and other native perennials are closely adapted to the Birrego district. Deep roots and hardiness enable the shrubs and grasses to grow fresh foliage throughout the harshest summers. Watertables are lowered, the chance of dryland salinisation reduced. In wintertime, as cold winds sweep the southwest slopes, the native plants offer sheep warming feed and shelter.

²¹ Graham Strong, email correspondence, 16 January 2004.

Wendell Berry considers the modern, industrial model of agriculture monological in method and arrogant in character. Responsive attention towards natural particularities is lacking. Never has the industrialised farming system 'asked for anything, or waited to hear any response.'²² The dominant mindset of industrial agriculture identifies production and profit maximisation as the primary goals and standards of measure. Alliances with natural forces are rarely sought. An alternative style of farming, one that instead took the wellbeing of people and rural land as its central focus, 'would approach the world in the manner of a conversationalist', Berry suggests. Seeking dialogue and intimacy with rural place, an ecological model of agriculture would abandon the future-oriented, powerful strategies applied across the farmlands of western nations. People rejecting the established model 'would undertake to know responsibly where they are', writes Berry.

They would ask what nature would permit them to do there, and what they could do there with the least harm to the place and to their natural and human neighbours. And they would ask what nature would *help* them to do there. And after each asking, knowing that nature will respond, they would attend carefully to her response. The use of the place would necessarily change, and the response of the place to that use would necessarily change the user. The conversation itself would thus assume a kind of creaturely life, binding the place and its inhabitants together, changing and growing to no end, no final accomplishment, that can be conceived or foreseen.²³

Inside Birrego district paddocks, Graham Strong and his family converse with place. Farmland offers understandings of connections and flows. As soaking rains draw nutrients beneath the shallow roots of cereal crops, the much deeper roots of saltbush and kangaroo grass return the leached elements to the surface. Sheep fed on perennial shrubs and grasses deposit organic matter and minerals across adjacent cropping paddocks. Graham is always 'catching up with the land', he explained, trying to sense and respond to the immediate needs of the

²² Berry, *What Are People For?*, p. 206.

²³ Berry, *What Are People For?*, pp. 208-209.

local ecology, to fold primary production into complex and shifting patterns. Fostering natural productivity and bolstering the resilience of land requires listening and responding to rural places. 'Listening' involves broad sensual engagement—feeling moisture in leaves and earth, looking at colours and textures, listening to animal calls, sensing the direction and temperature of wind. 'If I were a sheep, how would I see this paddock?' Graham asks himself. Low voltage electric fences enable better understanding of what sheep desire, as the animals are able to push through the wires. Semi-permeable, such fences are instruments of dialogue, not control. Often sheep temporarily leave the enclosure to graze young wattles and saplings within a band of regenerating local vegetation. Graham knows it is time to shift the mob if the sheep do not return, or if they are pushing through fences into areas of fresh saltbush. Seen as integrated components of a living system, sheep become expressive agents of place.

When we returned to Oakvale homestead, I noticed mallee bush-peas (*Eutaxia microphylla*) planted in red earth either side of the front path, inside the garden fence. Graham grew the small-leafed shrubs with red and yellow flowers from seed collected on a roadside nearby. The homestead and its garden seemed part of the flourishing life of paddocks and gentle hills beyond. Here, as seasons pass, conversation draws land and people closer together. I felt hopeful speaking with Graham at Birrego. Fragmentation and disorder need not be enduring legacies of colonisation. Careful listening to places and history, respectful dialogue with places and people, can bring regeneration.

Epilogue

'Straight lines would look really ludicrous', Owen said as we stood in the paddock between the creek and a steep range of forested hills.¹ A curved line of turned earth and seed lay at our feet. He pointed across the flat towards other wide spirals scraped into the ground, each separated by grassy expanses. Owen had worked outwards with a direct seeder hitched to a ute, sowing thousands of eucalypts, wattles, and understorey plants in widening arcs. After a long, hot summer, most seeds failed to grow. He planned to try again if the drought lifted in coming months, retracing the same path. 'I want to try and break up this bare landscape and get some structure', Owen explained. We walked towards the hills. Owen stopped beside a low mound, the detritus ring of an enormous, vanished tree. For centuries here, leaves and bark had fallen from the branches of a mature eucalypt. Bulky roots swelled the ground. Windblown earth and humus built up around the trunk during storms. Owen pointed to a dip in the centre of the rise. Someone in his family, he explained, had burned away the stump of the ringbarked tree. A long depression snakes out from the detritus ring, where fire consumed a major root. Across the paddock at regular intervals were other mounds, evidence of an open forest of established box trees amid grasses. 'They were sitting ducks', Owen said.

Hugh and Catherine Whitaker settled beside the upper reaches of Mitta Mitta Creek, east of Junee, in the 1870s. Some branches of the family stayed in the district, others moved away. For most of his childhood, Owen Whitaker lived on a

farm southwest of Wagga on the Bullenbong Plain. In the 1960s, his father inherited Oakley, a small property high in the Mitta Mitta valley, from a great-aunt. His parents decided to return to the district where the Whitaker family had lived for almost a century. From Owen's uncle they bought a larger and more intensively managed farm, Kimvale, down the valley from Oakley, and ran the two properties together. A decade later, Owen took over the farms and his parents moved away. He lived with his wife and children on Kimvale.

I walked with Owen across Oakley one autumn afternoon in 2003, the smaller and less transformed of the two family holdings. Owen loved visiting Oakley as a child. 'It was always a bit of a wild, different, funny place to our other production farm', he explained. Unlike Kimvale, where land was altered to suit industrial methods of production, natural patterns prevailed on Oakley:

We'd come up here and it would be like bush. It's not true bush as we know it now. But it was always different. And it had these old ramshackle buildings on it, and always had heaps of grass, scrub and trees and rabbits and kangaroos, and it was just so totally different to what we were used to.

We sat and talked on the rise above the creek, beside a rusting tank and the remains of a shearing shed destroyed in a bushfire. As we ate lunch, a peregrine falcon (*Falco peregrinus*) swept through the air before us. Owen pointed to a gorge in the hills where pairs of the predatory birds nest among rocks. Once when he walked near there, a falcon flew down and challenged his presence with a high-pitched cry. Sometimes at Oakley, Owen encounters wedge-tailed eagles:

They come down for a look and give you a bit of an eyeful and give you the distinct feeling that you're a bit of an outsider. And we're talking about the power of landscapes and country and it's that same sort of thing. I think what attracts people to certain landscapes is that it is wild, it's untamed, there's a power there. Yeah, it's still its own entity.

¹ Owen Whitaker, conversation at Oakley, Mitta Mitta district, 18 March 2003.

Coastlines, mountains, rainforests, and deserts tend to draw tourists and inspire imaginations today, not agricultural regions.² Farmland supplies food, fibre, and export dollars. Deeper meanings are evoked elsewhere. 'People want to go away and be inspired by other landscapes than these production landscapes', Owen said. 'But is that because they never really were inspiring, or because they've lost what it was that spoke to people, that touched them, that elevated them, that lifted their spirits, that rose above them?' Rural places had lost power to attract and inspire: 'I think this landscape's a bit tired and it's sad. And if people go away they don't want to go somewhere that's sad.' Owen mentioned 'the silent bush' of today, scrubby areas and remnants of grassy woodland devoid of animals other than birds. When his elderly relations were young, 'it was the other animals and noises and beings in the landscape that made it really special'. His grandfather once had a pet koala. As he relaxed inside by the fuel stove at nightfall, the creature clung to his leg. Local and urban people found delight in the lively and diverse nature of the Mitta Mitta district:

My family would talk about the good times they had in this landscape. People would come down from Sydney. And, you know, they were very much envied. They used to send game and food up on the train in crates. They'd work hard all week. They'd go and play cricket or tennis on Saturday. Sunday they'd go to church, and then after church there'd be people coming to visit. And some Sunday afternoons there'd be a fox drive. All the blokes would go out on horseback with their shotguns, and that was a community thing. They obviously loved interacting in the landscape. Yeah they went to the coast or down to Sydney very occasionally, but there was still a lot in the landscape to cherish.

As Owen farmed his two properties—Oakley, the less altered property higher in the valley, and Kimvale, the larger and more industrialised farm—he began to observe striking differences. Down the valley on Kimvale, stock often suffered from nutrient deficiencies and disease. Decades of high-input, high-output farming methods had depleted soils of essential trace elements, nutrients, and organisms. Pastures no longer gave stock a balanced diet, and intensive farming was causing soil acidification. In contrast, sheep and cattle thrived

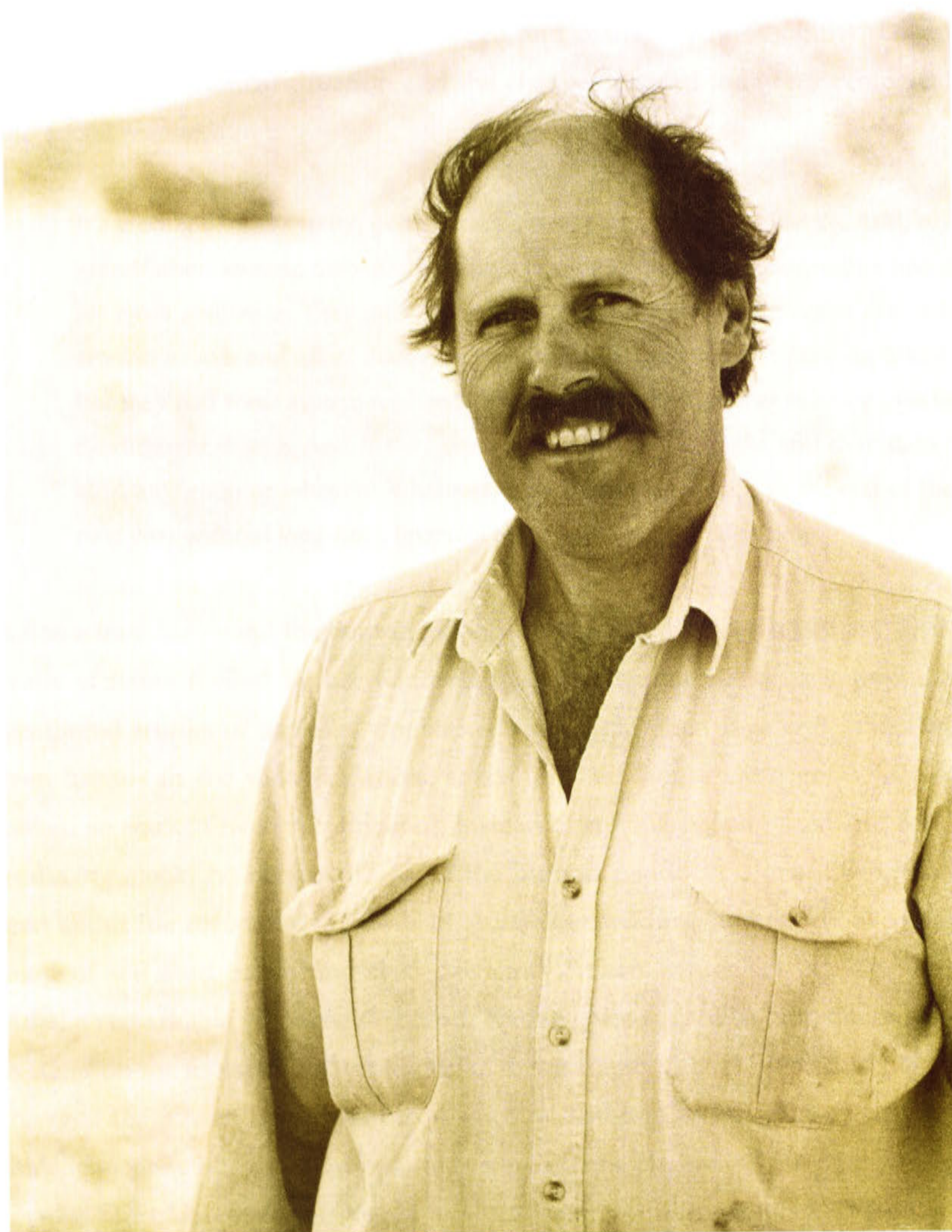
² See 'Curtains of sandstone and power', Chapter Four.

inside Oakley's grassy paddocks with fresh spring water. Unlike on Kimvale, Owen spread little fertiliser across Oakley. He regularly top-dressed only a small area of sown pasture. Nor did the diverse stands of native grasses and herbs need insecticides or herbicides to stay healthy and productive. Soils remained stable, and showed no signs of acidification. Owen started listening to the land:

I started to learn a lot. And I started to think: 'Well, here's a great insight, in that there's totally different forms of country, and they're telling me different things.'

When Owen considered the minimal amount of inputs and time needed to maintain the productivity of Oakley's paddocks, he realised the small property offered a far greater monetary return per hectare than Kimvale. Walking through a paddock, we stopped beside a low shrub where a quail (**barraburrun, gunhamany**, *Coturnix* spp.) or groundlark had nested in the grass. White pellets of bird manure lay inside a faint depression. Here was 'a hotspot of nutrient', Owen explained, extremely high in nitrogen and phosphorus. When a bird made a nest in the shelter of a shrub, nutrients essential for plant health and productivity soaked into the earth. 'Too slow for our reckoning, or our contemplation, but sure and stable and happening nonetheless', Owen said. Without the shrubs and various other plants, such interactive processes cannot occur. Natural productivity and ecological stability plummets. Across the southwest slopes, where a tightly managed network of paddocks comprising few plant and animal species has replaced diverse and dynamic communities of grassy woodland, ecological disorder will continue to mount: 'As soon as you really modify a landscape beyond a certain point, you're only on borrowed time.'

Bringing ecological stability and wellbeing back to farmland requires the recognition and disabling of destructive economic dynamics. Most farms are highly capitalised. Survival in a tightly competitive global marketplace requires vast amounts of expensive inputs to produce great quantities of food and natural fibre. Land managers are rarely able to respond adequately to the shifting needs of local ecologies. Short-term economic demands are often at odds with longer-



Owen Whitaker, Oakley, Mitta Mitta district, March 2003.

term ecological needs.³ Farm business managers must attend to the pressing imperatives of financial institutions and globalised markets. In the decades after World War Two, intensive methods of production undermined the resilience and stability of farmland, compounding the problem. Generations ago, farmers enjoyed greater degrees of independence and management flexibility. Owen described the historical situation and the changes needed today for ecological and social regeneration:

It's getting back diversity, getting back choice, getting back resilience. And, my grandfather, looking through his little diary, he lived in a landscape that had a bit more resilience. They still had terrible droughts and dust storms and soil erosion events and all of that. And they went through tough times, no doubt. But they had some system resilience there, and they had choices of being able to do different things. And if they went through a bad drought and they didn't strip any grain or wheat or whatever, they could go through to the end of the next year without long-term financial impact. We can't do that now.

A fierce bushfire swept the Bethungra and Mitta Mitta districts in January 1990. Walls of flame fuelled by hot winds burned Oakley bare. Fire consumed the weathered trunks of saplings ringbarked long ago, fallen logs and branches, even humus in the topsoil. Fences, sheds, and the house were gone. 'It just looked so stark', Owen remembered. Instead of sowing pasture seed and reintroducing stock, he decided to leave the burned paddocks alone. Owen had read about the regenerative power of Australian wildfire, and he knew something of soil seed banks and seed dormancy. When winter and spring rains came, a remarkable response unfolded. Native grasses grew so tall, Owen had to stand on the footrests of his motorbike to see ahead. Grassy woodland plants emerged that Owen had never before encountered on Oakley: yam daisies, orchids, chocolate lilies, pea bushes, and many others. He invited a botanist from Charles Sturt University at Wagga to see the extraordinary display. The scientist identified over two hundred species.

³ See 'Demanding production', Chapter Four.

Owen began to feel a sense of responsibility towards the rare swathe of regenerating plants, and wanted to learn how best to care for it. He knew Wiradjuri people once used fire to foster a diversity of grassy woodland species. Owen asked around, hoping to find someone with knowledge of burning practices. People directed him to an elderly man at Narrandera. Owen talked to him about Oakley and his desire to manage the land carefully. The Wiradjuri man advised Owen to return to the farm and to spend time relaxing. 'Just try and listen to your god', he said. On reflection, Owen took the advice as a suggestion to engage closely with particular natural forces and patterns active at Oakley:

What it meant to me was: 'Look, you bloody idiot, it's right there under your nose. Look at the land. Look at the vegetation. Observe from year to year. Look at the difference and the change in the seasons.' You know, it will tell you. The land will tell you.

Owen discovered that land did more than speak. Over years, places worked deeply into people, shaping and holding them. During a traumatic period in the middle of the 1990s, Owen's marriage came to an end and Kimvale was sold. With regret, he walked away from land moulded by generations of his family, from paddocks bestowing identity. The most difficult aspect of leaving, Owen remembers, was seeing the effect on his children. Hillsides and creeks had given them something profound. Active, nourishing relations between his children and the land were broken:

I was just stunned by how much that meant to them, the landscape. And how upset they were, and just how big a part of their life it was. Yeah, it was really gut wrenching, really. Up until that they were typical teenagers. Yeah they liked the farm and liked doing stuff there, but they liked going off with their mates and they were always bitching about not being able to go to town and that. So you kind of got the impression, you know, that it doesn't really mean much to them. But I was very very wrong when it came to that. Even now, my kids say to me: 'Dad, you know, we just feel absolutely privileged to have grown up on the farm and experienced the things that we did. We just think we're so lucky. We just had the best years we could ever have as kids there.' And that really blows me out. It just goes to show what can be the value of a

landscape, outside of production. To have that effect on people. To have that connection. To provide that security.

Before the sale of Kimvale, Owen had found the experience of living in a modern farming area increasingly unpleasant. Declining terms of trade and relentlessly competitive global markets were forcing landholders to continually intensify farming practices to boost production. A range of environmental and social factors—the smell of agricultural chemicals, smoke from stubble burning, the almost constant noise of diesel engines, the frantic pace of life, a declining sense of local community—contributed to his decision to relinquish Kimvale. The meanings of the farmland and paddocks had changed:

I was really sick to my stomach of living and working in that landscape—which is not very far from here—but it had a totally different imperative to what's up here. It was a very modified landscape. I referred to it as an industrial landscape. And that may not seem too much of a surprise to many people. But, as I grew up as a kid, we never thought of it as that. Suddenly it just came to me that that's what it had become. It wasn't a natural landscape anymore. And it wasn't a family, social, or a cultural landscape. It was a straight-out industrial landscape because industrial production had become the imperative and that was driving the shape and the makeup and the type of landscape it was. And to me it was pretty ugly and difficult.

In contrast, Oakley could produce healthy sheep and cattle without heavy applications of inputs and energy, and was 'a great place to be.' Owen decided to keep Oakley, higher in the valley where his family history was deeper than on Kimvale. Remarried, he bought another farm southeast of Yass on the southern tablelands, and moved there. Owen knew that something more was present on the small farm he kept at Mitta Mitta, a significant dimension absent from modern agricultural understandings, missing even from the relatively holistic perspectives of ecological science. Inside Oakley's paddocks, Owen told me, he hears 'the echoes of the past.' To care for places, to keep land strong, requires a sense of the past infusing the present, of time unfolding within dynamic and shifting terrains. Ecological integrity enables such understanding:

Here I can feel it. I can feel, you know, I can feel a small part of the short time that my white ancestors have been here. But, the majority of it I can feel just an enormous, powerful sort of a presence here, of thousands and thousands of years of human habitation and millions of years of life processes going on here—still represented, still represented in a valid way. Because there are still things happening here naturally that are totally out of my control—big things that are shaping this landscape.

Owen mentioned stories handed down through family generations of his ancestors' interactions with local Wiradjuri. When Hugh and Catherine Whitaker arrived in the Mitta Mitta valley in the 1870s, Owen learned, Wiradjuri families lived there independently of settlers. Once, his ancestor Hugh had to go away for several weeks. Soon after departing, Hugh realised he had forgotten a pair of greenhide hobbles and turned around. Arriving back at the bark hut, Hugh Whitaker found Wiradjuri men threatening his wife Catherine and the children with spears, poking at them through the flimsy walls. Owen did not learn how the event ended, but thought violence was probably avoided. In the early years, elderly relatives told him, relationships between the Whitaker family and local Wiradjuri people were peaceful and mutually respectful. The grave of an honoured tribal chief lay on Wingana, the original Whitaker family property. Three trees with patterns carved into the trunks once surrounded the gravesite. Wiradjuri left the district in later years as settlement intensified. Joe Whitaker, Owen's uncle, said Wiradjuri used to return to Mitta Mitta occasionally to visit the grave.⁴ Joe told a story of his uncles, as boys, deciding to open the grave and unearth weapons the family understood were buried alongside the dead warrior. Digging, they saw ghostly faces emerge from nearby trees. The boys fled. Decades later, only one of the three carved trees remained, dead and decaying. Joe Whitaker carefully removed the decorated section of heartwood and donated it to the Gundagai museum for safekeeping, along with spears and woomeras collected at Mitta Mitta and a photograph of the dead tree. His

⁴ Dulcie Whitaker was Joe's sister and Owen's aunt. She mentioned elderly women and children returning to visit a site several kilometres southwest of the grave, where a recreation ground once existed beside Mitta Mitta Creek.

daughter Elizabeth told Owen the family had always respected local Wiradjuri. Joe Whitaker never allowed his children to go near the warrior's gravesite.

Beside the creek on Oakley, Owen finds stone flakes and blades. Some of the tools look fresh and clean, he explained, as if made only a year or two ago. Others are ancient, weathered. Like narratives of encounters with Wiradjuri passed down through family generations, Owen considers the stones significant partly because they represent a tenuous bond with an alternative way of understanding relevant today at Mitta Mitta. Above the creek running with spring water, on the hillside where we talked, Wiradjuri saw and carefully tended a dynamic living system. Perceptions of people as constructive members of complex biological communities are necessary for the regeneration of rural places. To be strong and naturally productive, local ecologies must be cared for. Responsive, careful relationships require intimate knowledge of places. Western notions of a hyper-separated opposition between people and the rest of nature impede dialogue and empathy. Feelings of belonging and connection to the life of places are denied.⁵

Likewise, understandings of the present as severed from the consequences of historical events block the acceptance of responsibility for social and ecological wellbeing. At the Temora Rural Museum, northwest of Oakley, stone axe heads collected in local paddocks are displayed in a glass cabinet. Alongside historic and more contemporary farm equipment, the stone tools help construct narratives of linear progress from primitive Aboriginal pasts to sophisticated settler futures. In contrast, the stone flakes and blades at Oakley, as described by Owen, offer possibilities to dismantle problematic dichotomies of western belief: past versus future, primitive versus European, wild versus civilised, body versus mind, nature versus culture, land versus people, rural versus urban. The regeneration and enduring health of rural places and agricultural regions requires fresh narratives and perceptual frameworks to undermine and replace inappropriate and destructive traditions of thought and culture.

⁵ Freya Mathews, 'Becoming Native: An Ethos of Countermodernity II', *Worldviews: Environment, Culture, Religion*, vol. 3, 1991, pp. 245-246.

Geographic and cultural divides between rural and urban domains keep ecological wounds of farming regions open and festering. Farmers need support to counter a powerful and corrosive system of global trade and industrial production. Potential exists for city residents to turn towards adjacent rural hinterlands. Seeking dialogue and close ties with nearby rural places and people, urban dwellers may sense personal and shared embeddedness within the natural systems and histories of their local regions. A deeper and more extensive mode of caring for Australian farmland may develop as people take responsibility for the wellbeing of places surrounding and nourishing them. Acceptance of ethical obligations to care for nearby farmlands promises more than ecological and social regeneration. Rejection of industrial and colonial mindsets enables emotional and sensual engagement with natural particularities and patterns. As Owen Whitaker and his children learned at Mitta Mitta, lively places offer people rich gifts: a broader and deeper experience of our humanity, and land to know intimately as home.

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